

**BURGH OF GREENOCK**

---



# **Annual Report**

on the

## **Health of the Burgh**

**FOR THE YEAR 1936**

BY  
**ALEXANDER JOHNSTONE, M.C., M.A., M.D., Ch.B., D.P.H.**  
*Medical Officer of Health*

GREENOCK:  
PRINTED BY J. STORER & SONS, 16, MILLAR'S STREET.  
1937



**BURGH OF GREENOCK**

---



**Annual Report**  
on the  
**Health of the Burgh**  
FOR THE YEAR 1936

BY  
ALEXANDER JOHNSTONE, M.C., M.A., M.D., Ch.B., D.P.H.  
*Medical Officer of Health*

## LIST OF STAFF.

### Medical Officer of Health.

Alexander Johnstone, *M.C.*, *M.A.*, *M.D.*, *Ch.B.*, *D.P.H.*

### Assistant Medical Officers of Health.

Archibald J. Campbell, *M.B.*, *Ch.B.*, *D.P.H.*

Helena M. Shanks, *M.B.*, *Ch.B.*, *D.P.H.* (Resigned 8/3/36)

Isobel M. Brown, *M.B.*, *Ch.B.*, *D.P.H.* (Took up Duty 12/3/36).

### Health Visitors.

Joan M. Pollok.

Mrs Jessie Macfarlane.

Mary Duncan.

Mrs Jessie Gillespie.

Jean Wood.

Annie Lonie.

In addition all the nurses of the Greenock and District Nursing Association act as part-time Health Visitors under the Maternity and Child Welfare or Tuberculosis Schemes.

### Public Health Staff.

John McCrone, Epidemic Officer.

Minnie Sinclair.

Elizabeth McKellar.

Helen C. Bog.

Mary A. Cormack

Elsie C. Greenham.

(Took up duty 15/1/36).

Margaret C. MacElwee.

Mary Kincaid

Ella S. Sloan

(Took up duty 17/2/36).

(Resigned 15/2/36).

### Maternity Hospital.

Ethel C. Thomson, Matron.

Elizabeth Gribben.

Florence M. Kendrick (Resigned 10/10/36).

Elizabeth W. Himsworth (Took up duty 16/10/36).

### Venereal Diseases Special Treatment Centre.

John Carson, Orderly.

### Disinfecting Station.

Patrick O'Kane, Station Disinfecting Officer.

Archibald Comrie, District Disinfecting Officer.

### Reception House.

Mary Gilmour, Matron.

### Part-time Officers.

John Miller, *M.B.*, *Ch.B.*,

William A. Milne, *M.B.*, *Ch.B.*,

} Surgeon Accoucheurs.

Randolph Douglas, *L.D.S.*, *D.D.S.*, *L.R.C.P.*, Dental Surgeon.

## TABLE OF CONTENTS.

---

	Page.
Bacteriological Examinations, . . . . .	78
Births and Birth-rate, . . . . .	7
Causes of Death, . . . . .	8
Cerebro-spinal Meningitis, . . . . .	15
Chickenpox, . . . . .	14
Factors in Physical Fitness, . . . . .	17
Deaths and Death-rate, . . . . .	8
Diphtheria, . . . . .	13
Disinfection, . . . . .	82
Drainage, . . . . .	91
Enteric Fever, . . . . .	14
Factories and Workshops, . . . . .	90
Hospital Accommodation and Ambulance Arrangements	63
Housing and Town Planning, . . . . .	85
Infantile Mortality, . . . . .	7
Infectious Disease, . . . . .	12
Maternity Service and Child Welfare Scheme, . . . . .	29
Measles, . . . . .	12
Meat Inspection, . . . . .	85
Medical Care and Nursing of the Sick Poor, . . . . .	65
Meteorology, . . . . .	91
Midwives (Scotland) Act, . . . . .	57
Milk and Dairies, . . . . .	83
Nuisances, . . . . .	91
Pneumonia, . . . . .	15
Population, . . . . .	7
Port Sanitary Administration, . . . . .	80
Propaganda, . . . . .	92
Puerperal Fever and Puerperal Pyrexia, . . . . .	16
Reception House, . . . . .	82

	Page.
Rivers Pollution, ....	91
Scarlet Fever, ....	12
Sera, Vaccines and Insulin, ....	79
Smallpox, ....	15
Statistical Comparison of Districts, ....	11
Statistical Summary, ....	6
Suspected Food Poisoning, ....	21
Tuberculosis Scheme, ....	21
Venereal Diseases Scheme, ....	58
Vital Statistics, ....	7
Water Supply, ....	91
Whooping Cough, ...	12

---

#### APPENDIX TABLES.

(I).—Vital Statistics, ....	95
(II).—Causes of Death—Registrar General, ....	94
(III).—Causes of Death—Public Health Districts, ....	95
(IV).—Population and Principal Rates per 1,000, 1881-1936, ....	96
(V).—Sources of Notification of Infectious Diseases, ....	97
(VI).—Monthly Incidence of Infection Diseases, ....	98
(VII).—District Incidence of Infectious Diseases with removals to Hospital, ....	99
(VIII).—Infectious Diseases Rates, 1900-1936, ..	100

To the Department of Health for Scotland,  
and the Local Authority for the Burgh of Greenock.

LADIES and GENTLEMEN,

I beg to submit my Annual Report on the Health and Sanitary condition of the Burgh for the year 1936.

This may be said to have been a favourable year as far as infectious disease was concerned. A campaign for immunisation against diphtheria was successfully launched.

The birth-rate, 20.29, is the lowest rate ever recorded in the burgh, and is just over half the rate of fifty years ago.

The general death-rate, 13.7, is lower than that of last year, and is also below the average for the last five years.

The maternal death-rate, 7.34, is lower than last year, and the infantile mortality rate, 101, is slightly higher. These figures are not satisfactory, but every effort is being made to produce improvement.

The pulmonary tuberculosis death-rate is 0.63 and is the lowest on record.

I have again to express my thanks to the staff of my department for their ever ready help and constant loyalty, and to my colleagues in the Corporation for their courtesy and co-operation during the year.

I am,

Ladies and Gentlemen,

Your obedient Servant,

ALEXANDER JOHNSTONE,

Medical Officer of Health.

*28th July, 1937.*

## STATISTICAL SUMMARY.

1936.

Population as estimated at the middle of 1936, .....	80,524
Acreage of Burgh, ..... ..	3,170
Density of population per acre, ..... ..	25.40
Birth-rate, ..... ..	20.3
Illegitimate Birth-rate per 100 births, ..... ..	5.7
Marriage-rate (uncorrected), ..... ..	7.4
Death-rate—all causes, ..... ..	13.7
Death-rate—all tuberculosis, ..... ..	0.92
Death-rate—tuberculosis of respiratory system, ..... ..	0.63
Death-rate—non-pulmonary tuberculosis, ..... ..	0.29
Death-rate—principal epidemic diseases, ..... ..	0.41
Infantile mortality rate, ..... ..	101

All rates given are corrected for transfers except where otherwise indicated.

## PUBLIC HEALTH DISTRICTS.

- 
- A—EAST DISTRICT—corresponds to municipal wards Nos. I., II., and III.
- B—EAST CENTRAL DISTRICT—corresponds to municipal wards Nos. IV. and V.
- C—WEST CENTRAL DISTRICT—corresponds to municipal wards Nos. VI. and VII.
- D—WEST DISTRICT—corresponds to municipal ward No. VIII.



# Medical Officer's Report

For the Year 1936.

---

## VITAL STATISTICS.

**POPULATION.**—The Registrar General's estimate of the population of the burgh to the middle of 1936 is 80,524, and this figure has been used as the basis of all statistical calculations except where otherwise indicated.

This estimated population shows an increase of 544 over last year's figure.

The natural increase of population was 528. This shows a decrease on last year's figure of 585, and is below the average for the last ten years, namely 649.

**BIRTHS AND BIRTH-RATE.**—The number of births registered during 1936 was 1,618. This number on correction becomes 1,634 (864 males and 770 females) and the equivalent rate is 20.3. Last year's figure was 21.2, and the average for the last five years is 21.49.

The rate for the whole of Scotland is 17.9

Tables I. to IV. give further information on this subject.

**INFANTILE MORTALITY.**—The number of deaths of children under one year of age was 165, a slight increase over last year's figure of 156, but below the average for the last ten years, namely 177. The corresponding infantile mortality rate is 101, which is higher than last year's figure of 92, and above the average for the last ten years, namely 99.

The infantile mortality rate for the whole of Scotland was 82.

Atrophy, debility and marasmus was responsible for 24.24 per cent. of the total infantile deaths, pneumonia for 21.21, premature birth for 16.24, and diarrhoea and enteritis for 13.33.

**DEATHS AND DEATH-RATE.**—The number of deaths registered in the burgh was 1,134. When corrected for transfers, this figure becomes 1,106 (596 males and 510 females). The corresponding death-rate is 13.7. This figure is slightly lower than last year, when it was 13.9, and is also below the average for the last five years, 13.98. The average age at death was approximately 56 years.

The general death-rate for Scotland was 13.4.

**CAUSES OF DEATH.**—The following were the chief causes of death during 1936:—Heart disease, 167; malignant tumours, 117; cerebral haemorrhage, 105; pneumonia, 84; congenital debility, premature birth, malformations, etc., 77; tuberculosis (all forms), 74; bronchitis, 56; old age, 48; violent deaths other than suicide, 48; diseases of the nervous system and sense organs, 39.

Tables II. and III. give further information regarding causes of death, which may be conveniently grouped as follows:—

*Principal Epidemic Diseases.*—Influenza was the cause of 20 deaths (11 of which were in persons over five years of age). measles was responsible for 4 deaths, cerebro-spinal fever and diphtheria for 2 each, scarlet fever and whooping cough for 1 each, and other epidemic diseases for 3.

The total number of deaths from this cause was, therefore, 33, which produces a death-rate of 0.40. These figures are much lower than the corresponding figures for last year, namely 63 and 0.78, and are also below the triennial averages 73 and 0.91.

*Tuberculous Diseases.*—During the year the number of deaths from pulmonary tuberculosis was 51, and the corresponding death-rate 0.63, as against 61 deaths and a rate of 0.76 last year. The average rate for the last five years was 0.79. This pulmonary death-rate is the lowest on record, the next best having occurred in 1932, when it was 0.66. There is now hardly a year in which a record low figure is not achieved in the deaths from tuberculosis.

Tuberculosis of other organs gave 23 deaths as against 7 last year. The non-pulmonary rate is 0.29 which is much above last year's figure of 0.09, and also above the previous quinquennial average of 0.22. This non-pulmonary death-rate does not show a continuation of last year's exceptional figure, but this could not be expected as the latter was obviously abnormal.

The total tuberculosis rate is, therefore, 0.92, which is above last year's figure of 0.85, but below the average for the last five years 1.02.

The rate for all Scotland is 0.74, pulmonary 0.55, non-pulmonary 0.18.

*Malignant Disease.*—Cancer in its various forms was responsible for 117 deaths (56 males and 61 females), and the death-rate was 1.45. Last year the number of deaths was 136 and the rate 1.7. The average number of deaths for the last ten years is 114 (53 males and 61 females), and the death-rate 1.42 (males 0.66, females 0.76).

These figures show a slight decrease on those of last year.

*Diseases of the Circulatory System.*—The number of deaths from diseases of the circulatory system was 195, of which 167 were from diseases of the heart, and 28 from other causes. The heart disease death-rate is 2.07, which is lower than the corresponding figure for last year, namely, 2.11, but higher than the last five yearly average 1.79.

*Diseases of the Respiratory System.*—These diseases produced 156 deaths during the year, which figure gives an equivalent death-rate of 1.93. These figures are above those of 1935, which were 145 deaths and a rate of 1.81. The average number of the last 10 years was 186 and the rate 2.31.

Pneumonia was responsible for 84 of the total respiratory deaths and the death-rate from this cause is 1.04. Last year the number was 80, and the death-rate 0.95, the average rate for the last five years being 1.15. Of these deaths 34 occurred in children under 1 year, 11 in children aged 1-5 years, and 10 in persons over the age of 65.

Bronchitis accounted for 56 deaths, and of these 7 were in children under the age of 5, while 32 were in persons over 65 years of age. The death-rate was 0.69 as against 0.68 last year, and the previous quinquennial average 0.77.

*Diseases of the Nervous System and Sense Organs.*—The deaths classified under this group number 144, of which 105 were due to cerebral haemorrhage, embolism or thrombosis. The death-rate from this cause is 1.30 as against 1.67 last year, and the last five yearly average 1.41.

*Diseases of the Digestive System.*—Deaths referable to the digestive system numbered 81, of which 30 were due to

diarrhoea and enteritis, and of these 22 were in children under one year of age. Thirteen were caused by gastric or duodenal ulcer, 11 by diseases of the liver, 8 by appendicitis, and 19 by other digestive diseases.

The number of deaths from diarrhoea and enteritis in children under one year of age was 13 in 1935, and the last quinquennial mean is 15.

*Diseases of the Genito-Urinary System.*—The deaths from diseases of this system totalled 55, of which 28 were due to nephritis and 27 to other conditions.

*Diseases of Pregnancy and Childbirth.*—The Registrar General shows 10 deaths from this cause, 3 being due to puerperal sepsis and 7 to other puerperal causes.

The following Table gives the Registrar General's puerperal death figures for the period 1900-1936 along with figures calculated in this department, which, being the result of considerable detailed investigation, probably give a more true indication of the maternal death-rate:—

Period.	Death-rate from Puerperal Sepsis, Registrar General.	Death-rate from Other Puerperal Causes, Registrar General.	Total Puerperal Death-rate, Registrar General.	Maternal Death-rate Public Health Department.
1900-1904,	2.46	2.84	5.31	—
1905-1909,	1.59	3.53	5.13	—
1910-1914,	1.26	5.37	6.63	—
1915-1919,	0.88	4.95	5.83	—
1920-1924,	1.58	4.71	6.29	—
1925-1929,	1.80	4.16	5.96	—
1930,	—	4.76	4.76	5.82
1931,	1.62	6.49	8.11	8.11
1932,	1.76	5.28	7.04	5.87
1933,	3.05	4.27	7.32	6.71
1934,	0.60	4.21	4.81	4.21
1930-1934,	1.40	5.00	6.40	6.14
1935,	1.77	4.72	6.49	7.67
1936,	1.83	4.28	6.11	7.34

The maternal death-rate for Scotland was 5.6.

Investigation in this department shows that there were in all 18 maternal deaths, being the same number as last year.

The causes of death may be classified as follows:—

(1) Conditions connected with pregnancy and parturition, 12.

Toxaemia,	-	-	-	-	-	-	3
Sepsis,	-	-	-	-	-	-	3
Pulmonary embolism,	-	-	-	-	-	-	2

Ruptured uterus,	-	-	-	-	-	1
Adherent placenta,	-	-	-	-	-	1
Breast abscess,	-	-	-	-	-	1
Cardiac failure,	-	-	-	-	-	1

(II) Conditions associated with, but not directly connected with pregnancy and parturition,	-	-	-	-	6
Pneumonia, intercurrent,	-	-	-	-	3
Heart disease,	-	-	-	-	1
Bronchitis and myocarditis,	-	-	-	-	1
Gas poisoning (suicidal),	-	-	-	-	1

Nine of these cases received adequate ante-natal supervision, 5 being under the care of a private practitioner and 4 attending the Corporation ante-natal clinic regularly: six had some, but apparently inadequate supervision, and in 3 cases there was no supervision at all.

*Diseases of Early Infancy and Congenital Malformations.*—Deaths from these causes numbered 77, and may be classified as follows:—Atrophy, debility and marasmus, 40; premature birth, 27; congenital malformations, 6; injury at birth, 2; hydrocephalus, 1; atelectasis, 1. Last year the number was 79, and the average for the last five years is 77. Further information regarding diseases of children under one year of age will be found in the maternity and child welfare section of the report.

*Violent Deaths.*—These numbered 54, of which 6 were apparently suicides (4 males and 2 females), and 48 accidental (27 males and 21 females). The corresponding figures for last year were 4 suicides (3 males and 1 female), and 40 other violent deaths (31 males and 9 females), while the average for the last 10 years was 5 deaths from suicide and 35 from other violence.

**STATISTICAL COMPARISON.**—The following table gives a comparison of the various rates in the Public Health Districts, and the average age at death as estimated in this Department:—

	A.	B.	C.	D.
	East	East Central	West Central	West
Population, ... ..	27,482	13,964	25,113	13,965
Density per acre, ... ..	24.53	102.67	40.57	10.78
Birth-rate, ... ..	30.38	14.17	19.43	11.67
Infantile Mortality-rate, ... ..	99.40	101.01	104.50	67.48
General death-rate, ... ..	16.01	11.74	12.26	13.17
Tuberculosis death-rate, ... ..	1.11	0.14	1.11	0.35
Average age at death, ... ..	52.71	58.68	55.09	63.82



## INFECTIOUS DISEASE.

The total number of cases of infectious disease ascertained during the year 1936 was 2,786, which is below last year's figure of 3,145 and also below the mean of the previous quinquennium 3,243. The incidence rate of infectious disease in the community as a whole during the year was 34.59 per 1,000 of the population.

Further information regarding infectious disease will be found in Tables V to VIII.

MEASLES.—There were 906 cases of this disease notified during the year, 419 of which occurred in children under the ages of 5. There were 4 deaths, all of which occurred in children under 5. The incidence rate over the age period 0-5 is, therefore, 51.48, the death-rate 0.49, and the case mortality rate 0.95 per cent.

Last year 1,073 cases were notified, and the average for the last five years is 1,244. Five cases had also chickenpox, three whooping cough, and two mumps. Seven cases were removed to hospital. The months of highest incidence were December, November, June, October, and September, in that order.

The special arrangements previously made for the visitation of cases of measles in children under five were continued and found to be of great value. Milk was provided where it appeared to be necessary.

WHOOPING COUGH.—One hundred and twelve cases were notified, with the highest incidence in December and November. Last year's figure was 1,070, and the last quinquennial mean 528. Three cases also had measles, and 3 chickenpox.

The number of cases in children under 5 years of age was 42, and there was 1 death during that period of life. The incidence rate of the age period 0-5 is, therefore, 5.16, the death-rate 0.12 and the case mortality rate 2.38 per cent.

No special arrangements for the visitation of whooping cough were made, as that course did not appear to be necessary.

SCARLET FEVER.—Seventy-eight cases were notified, with the highest incidence in November and October. Last year's figure

was 94 and the average for the last 5 years 557. There was 1 death. Three cases had also chickenpox. The incidence rate over the whole population is 0.96 and the case mortality rate 1.28 per cent.

**DIPHTHERIA.**—There were 108 cases of diphtheria discovered during the year. The number last year was 122, and the last 5 yearly average is 133. The incidence rate over the whole population is 1.34 and, as the deaths numbered 2, the death-rate is 0.02, and the case mortality rate 1.85 per cent.

**Contacts.**—Swabbing of the throats of contacts of diphtheria cases was carried out in 180 instances where it appeared to be necessary, and 12 such persons gave a positive result. All of them were admitted to hospital and 5 developed symptoms of the disease.

**Immunisation.**—The campaign which was started towards the end of last year continued throughout 1936. The method of approach remained the same, namely, through the schools to the parents. With the co-operation of the County Education Committee and the headmasters of individual schools, each child received an envelope containing literature and a special return post card to be taken home. Parents desirous of securing facilities for immunisation filled up the relevant details on the post card and forwarded it to the Public Health Department, whereupon attendance at a convenient session was arranged. The sessions, 45 in all, were held on Saturday mornings, and the total attendance amounted to 2,252, giving an average of 50 per session.

At first the method adopted for immunisation was three injections of Toxoid-Antitoxin mixture at weekly intervals, but before long the following policy was adopted. Children under 8 years of age were treated by the "one shot" method, the immunising dose being a single injection of 0.5 c.c. of Alum Precipitated Toxoid. Children from 8-12 years received three injection of Toxoid-Antitoxin mixture, and persons over 12 were given three injections of Toxoid-Antitoxin Floccules. Persons over 16 years, and anyone under that age with a previous history of diphtheria, were first Schick tested to determine whether or not immunity to the disease was present.

Approximately three months after the last injection those who had completed a course were asked to attend for the "posterior" Schick test to discover whether immunity had been established. It does not appear to be possible to get all the immunised to attend for this procedure, but nevertheless the response has been gratifying. Up to the end of the year everyone so tested proved to be "Schick negative," that is, the injections had successfully produced an artificial immunity. It is not expected that the results will continue at this 100 per cent. level, but such a start is stimulating and encouraging.

The figures for the year are tabulated as under:—

	Total Attendances.	Immunisation.				Primary Schick Test.			Posterior Schick Test.		
		"One Shot" Immunisation.	"Three Shot."			Tested.	Positive.	Negative.	Tested.	Positive.	Negative.
			First Injection.	Second Injection.	Third Injection.						
Total at 31/12/35,	72	—	32	25	15	—	—	—	—	—	—
Year 1936, - -	2,252	139	529	489	471	75	20	50	249	—	248
Total to 31/12/36,	2,324	139	561	514	486	75	20	50	249	—	248

CHICKENPOX.—Eight hundred and twenty cases were notified during the year, mostly during December, November and October. There were no deaths. The number last year was 624 and the last five yearly average 597. Eight cases had also mumps, 5 measles, 3 scarlet fever, and 3 whooping cough.

ENTERIC FEVER.—Six cases of this group were notified as against 7 last year, and a previous quinquennial average of 5. One of the cases was typhoid fever, and 3 were of the para-



typhoid B. type, while 2 were later diagnosed as septicaemia. Both of these last cases were seamen admitted from ships with a provisional diagnosis of enteric group fever. One of the cases of septicaemia died; all the others recovered.

No source of infection was discovered in any of the cases.

**PNEUMONIA.**—One hundred and eight cases were discovered, 56 being of acute primary type, 5 influenzal, and 47 presumably secondary to some other condition. The highest incidence occurred in the months of January and December. Last year's figure was 103, and the average for the last 5 years is 124. Six cases only were removed to hospital, and the number of deaths was 84.

**CEREBRO-SPINAL MENINGITIS.**—There were only two cases of this disease notified during the year, and in one of them the diagnosis was extremely doubtful. This was the case of a hospital nurse, who had taken ill in another district, and returned home after the illness was advanced.

**MUMPS.**—During the year cognisance was taken of mumps for the purpose of school exclusion. Five hundred and eighty-five cases in all were notified to the department.

**SMALLPOX.**—There were no cases of this disease during 1936.

**Vaccination.**—The number of births registered in the east and west registration districts of the burgh during 1935 was 1,661. By the end of the year under review 291 of these children had been successfully vaccinated, 11 were found to be constitutionally insusceptible, 111 had died before vaccination had been carried out, in 3 a medical certificate of postponement had been issued, and 22 had left the district or were otherwise unaccounted for, while declarations of conscientious objection had been made in respect of 1,223. Seventy-three per cent. of the children available for vaccination were, therefore, not vaccinated.

One hundred and sixty-nine vaccinations were carried out on 115 children under the maternity and child welfare scheme at the Corporation clinics. In 80 cases vaccination was successful on the first occasion, in 16 on the second, and in 3 on the third, while in 16 cases vaccination was unsuccessful after three attempts, and the children were considered insusceptible.

## PUERPERAL FEVER AND PUERPERAL PYREXIA:—

(I.)—Total number of cases occurring in the area of the Local Authority (corrected figures as finally diagnosed):

(a) Puerperal Fever (Maternity Hospital, 0),	-	-	2
(b) Puerperal Pyrexia (Maternity Hospital, 4),	-	-	19

(II.)—Total number of cases removed to Infectious Diseases Hospital:—

(a) Puerperal Fever (Maternity Hospital, 0),	-	-	2
(b) Puerperal Pyrexia (Maternity Hospital, 3),	-	-	9

(III.)—Total number of deaths:—

(a) Puerperal Fever (Maternity Hospital, 0),	-	-	1
(b) Puerperal Pyrexia (Maternity Hospital, 1),	-	-	2

(IV.)—Number of cases following instrumental delivery:—

(a) Puerperal Fever (Maternity Hospital, 0),	-	-	1
(b) Puerperal Pyrexia (Maternity Hospital, 2),	-	-	7

(V.)—Number of deaths occurring in cases under IV:—

(a) Puerperal Fever (Maternity Hospital, 0),	-	-	1
(b) Puerperal Pyrexia (Maternity Hospital, 1),	-	-	2

(VI.)—Number of cases where the Local Authority provided on the request of medical practitioners:—

(i) Consultant Service (included under Child Welfare),	1
(ii) Bacteriological Examinations, - - - -	0
(iii) Skilled nursing at home, - - - -	0
(iv) Hospital treatment, - - - -	11
Puerperal Fever, - - - -	2
Puerperal Pyrexia, - - - -	9

(VII.)—Observations on the working of the Regulations. Nil.

In addition to the above, there was one maternal death from septicaemia, but, as this followed a condition of breast abscess and was not notified, it has not been included in the above figures.

*Investigation.*—Two cases of Puerperal Fever occurred during the year, one of which died. This patient was a primipara age 27, delivered by forceps with perineal laceration. Perineal infection followed, which developed into septicaemia. The other case was also a primipara, age 17, who, on the tenth day after normal delivery, developed signs of puerperal infection and was removed to the Infectious Diseases Hospital, where

she was diagnosed as acute appendicitis and transferred to General Hospital. At the operation, an abscess of the broad ligament was discovered with appendix adherent.

The information elicited by investigation of cases of puerperal pyrexia may be summarised as follows:—

(I).—Age of Patients.—Under 20, 3; 20-24, 8; 25-29, 3; 30-34, 3; 35-39, 2.

(II).—Number of confinement.—First, 8; second, 6; third, 2; fifth, 2; seventh, 1.

(III).—Nature of attendance.—Midwife, 8; doctor, 4; institution, 7.

(IV).—Nature of confinement.—Normal, 12; forceps, 7 cases.

(V).—Possible exciting causes—

Conditions not attributable to parturition,	-	-	-	7
Septic conditions,	-	-	-	8
Nothing found on investigation,	-	-	-	4

## FACTORS IN PHYSICAL FITNESS.

There has been of late a great amount of ill-informed talk on the subject of physical fitness generally and nutrition in particular. The main reason for this seems to be that there is, as yet, no satisfactory standard of the state of nutrition of the individual, although it is clear that it is certainly not one of inches and pounds exclusively.

Nutrition and physical fitness are inter-related, and to a considerable extent dependent on one another. The chief factors governing them may be said to be (1) diet, (2) rest, (3) physical education.

### DIET:—

The first report of the Advisory Committee on Nutrition gives some very useful and practical information on diet, which may be baldly put as follows:—

(1)—Adequate quantities of the “protective foods” are necessary in the diet to ensure correct nutrition.

(2)—The “protective foods” are—

- (a) Milk and Milk Products (i.e. butter, cheese, etc.)
- (b) Vegetables.
- (c) Fruit.
- (d) Eggs.

(3)—Sea fish, particularly herring, have a high nutritive value.

(4)—Potatoes are valuable and should be more extensively used to replace some of the sugar and highly milled cereals, e.g. white flour, in the ordinary diet.

(5)—Skimmed milk, butter milk, and whey are valuable articles of diet, and should be made available and used for that purpose.

(6)—“ From the health standpoint, there is no other single measure which would do more to improve the health, development, and resistance to disease of the rising generation than a largely increased consumption of safe milk, especially by mothers, children, and adolescents. . . . The average daily consumption of milk should be about 2 pints per day for expectant mothers, from 1 to 2 pints for children, and not less than half a pint for the rest of the population.”

This is valuable information on which those who are in any doubt about questions of diet can safely rely.

There are doubtless difficulties to be encountered in certain cases, and the chief of these, as far as can be ascertained, are—

(1)—Certain persons undoubtedly do not like milk, or find that milk does not agree with them. Such persons can get a sufficiency of the protective substances from vegetables, fruit and eggs, as milk is not an essential where a good mixed diet is available. An eminent authority has stated that for those who can command a varied diet, including tomatoes, green vegetables, etc., milk is not necessary.

(2)—Certain persons consider that milk is too expensive. The same authority has made it clear that the reason for emphasising the value of milk is because the common diet of the poorer population with its large reliance on sugar, white bread and margarine, is deficient, and milk offers itself as the cheapest means of correcting nutritional faults.

There is, however, something in this objection of expense, for if we take the example of a father, expectant mother, and six children aged 2, 4, 7, 10, 13, and 16, the amount of milk required on the scale recommended would be about 8 pints per day, or approximately 14/- per week; which is utterly impos-

sible for a low wage earner. If milk, therefore, is to become the key of the population's nutrition, some means must be found of materially reducing the cost. In the meantime as much as can be afforded should be made part of the family diet.

(3)—Certain persons regard milk merely as a poor substitute for tea, or as a colouring agent for it. They cannot, or will not, look upon milk as a food, to be taken for their own good, and unfortunately often allow their children to follow their example. They are often people who are otherwise unsatisfactory, and who keep the maternal and infantile death-rates on a high level. They are the people who have inherited or acquired dietetic bad habits, and for whom education is necessary. They must be brought to realise that in an otherwise poor diet, milk is not only a valuable food, but the most valuable food of all, as it has the property of making up for the shortcomings of the other articles which they eat. It must be admitted that a pint of milk does not give the same satisfaction to a hungry family as a 2-lb. loaf of roughly the same price, but it must constantly be remembered that the satisfying of hunger, though much, is not by any means the whole story. There is necessity for both bread and milk: bread satisfies present desires, but milk builds up for the future—therein lies its value. It is difficult to get many people to think of the future, but in this matter we must keep on trying.

The Local Authority has realised this for many years, and has provided free milk under its maternity and child welfare scheme. In some households where milk has been given to an expectant mother, or nursing mother, or child, it has been found that this milk has not been used for the purpose for which it was provided, but was regarded merely as a general supplement to the family income, the favourite tabby cat being one of those to benefit. Such cases may doubtless be exceptions, but they show the difficulties under which the Health Department works in the face of persistent prejudice and ignorance. It would seem that in some cases hope can lie only in the rising generation and that, therefore, the school is the proper place for health teaching of this very important character. What use can a young woman make of learning if she does not know the elementary laws of health?

REST:—

Diet, although probably the main one, is not the only factor in physical fitness. There are other important things that re-



quire attention and one of these is rest. In some houses all the household activities are regulated so as not to wake the baby. That can be overdone, but it is on the right lines. In other houses the baby gets little or no consideration and its rest is entirely subordinate to "household occasions." The poor child is dragged, tired, sleepy, and peevish, to picture houses, meetings, and parties, and home again at a late hour. Thereafter he is fed at all hours to keep him quiet. A child welfare scheme, with all its benefits, has in many cases little chance against such odds. The baby should have as much rest as it is possible to get him to take.

Adequate rest is also necessary for others besides young children. Toddlers and school children need at least 10 to 12 hours sleep, adults 8 at least in the average case.

#### PHYSICAL EDUCATION:—

Exercise is another factor of some importance in this question: sufficient and sensibly regulated exercise contributes to the ideal of healthy physical fitness, which is desired by all. This does not refer to small children so much, as they usually regulate their own fairly satisfactorily, the only danger being that they overdo it if not watched. With school children and adults, however, the matter becomes capable of a measure of organised regulation, and the public conscience has lately been aroused to its importance. The School Medical Officer of Manchester puts the relation between nutrition and physical fitness very well when he writes—"While the object of physical education is to produce fitness, we must not forget that the community must be made fit for physical education. . . . One cannot educate physically in an adequate manner the child or man who is markedly under-nourished. We need good nutrition to produce fitness in the first place, and can maintain that fitness by physical exercises, for fitness, like mental capacity, may run to seed if not utilised." Children and adults get into physical bad habits and physical education helps to correct these by pointing the right way to physical poise and fitness.

Physical education admits of a rough division into (1) games and sports, and (2) physical gymnastics. Games and sports are in every way excellent, but not all, for various reasons, can indulge in them. More playing fields, swimming baths and halls are necessary to aid those who desire, and are able, to go in for outdoor or indoor sports, as the burgh is not too well endowed with such facilities.

There seems no doubt that in the schools more time could, with advantage, be devoted to physical education and facilities are available in most schools for this purpose. An organised scheme covering the whole period of school life, would be of great value. The opportunity of continuing physical education after leaving school should be available to adolescents also, and if some form of organised classes could be arranged to follow immediately on the school period, success of the movement would be more readily achieved, as it is very difficult to take up again after a lapse. There are at present no facilities for the adult to indulge in physical exercises unless he happens to belong to some organisation, and provision of a public gymnasium for this purpose is worthy of consideration and it would be an undoubted advantage if a person trained in physical education were in charge to organise, advise and instruct.

### SUSPECTED FOOD POISONING.

Two cases of suspected food poisoning were intimated to the department during the year. Both of these were fully investigated, but no evidence was found that a specific infection was present in the material eaten, nor was there any trace of chemical contamination. All the patients made a satisfactory recovery.

### TUBERCULOSIS.

The campaign against tuberculosis has been continued during the year and some points of successful effort have been recorded elsewhere.

The total number on the tuberculosis roll remains approximately at the level of recent years, but the general tendency appears to be more and more towards the notification of the early case, both pulmonary and non-pulmonary. This means earlier treatment with increased chance of complete cure, and will have its statistical effect in later years.

Although the arrangements for dealing with tuberculosis in the burgh may be considered fairly complete, new methods of treatment are constantly being evolved, and it is necessary periodically to review the equipment available for the carrying out of up-to-date procedures. Artificial pneumothorax has been a great step forward in the treatment of pulmonary tuberculosis, and many Greenock patients have derived benefit from it during the last few years. The necessity for periodic refills

following discharge from sanatorium, however, has always been an unsatisfactory feature of the after-care in so far as it is necessary for the patients to travel to Glasgow or Bridge of Weir to have this carried out, in some cases after completing a day's work. During last year circumstances made it possible for this treatment to be carried out in Greenock if an X-ray apparatus were under the control of the Department and within its premises. Application for suitable equipment was made to the King Edward Memorial Fund, and this request was granted, while the Corporation agreed to put the lower floor of the office building into commission as an X-ray department. This work was commenced during 1936 and was well under way at the end of the year.

An interesting innovation during the year was the trial of a new treatment for Lupus Vulgaris. Burgess (British Medical Journal, November 2nd, 1935), recorded the results of treatment of this condition by means of intradermal injections of phenylethyl hydnocarpate: his series consisted of eleven cases of whom four showed clinical cure, the remaining seven being greatly improved. Consequent upon the publication of this report, a review was made of the cases of lupus attending the dispensary for treatment with ultra-violet light. The new treatment was offered to these patients and five of them accepted. The results are as promising as those recorded by Burgess. Of the five cases treated, two show apparent clinical cure, a sufficiently long interval not having elapsed since the cessation of treatment to justify any stronger claim. One patient lapsed from treatment, but not before some improvement had taken place. The other two cases are still undergoing treatment, and both show marked improvement. In view of such results, the treatment is being persevered with.

The Housing (Scotland) Act, 1935 and the subsequent decision of the Corporation to give priority in decrowding to households where the presence of infection creates a danger, or where there is an illness problem, provided an opportunity to improve the housing conditions of patients suffering from tuberculosis. During 1936, 65 families in which tuberculosis existed were given new houses of such a size as to eliminate overcrowding, and, where possible, to provide the patient—particularly if he had a positive sputum—with a room to himself. Previous to this such Corporation houses as were vacated from time to time were offered to this department and were



utilised for the rehousing of tuberculosis patients, but the number of such houses was always limited. In addition, a certain number of patients have been rehoused from time to time in the ordinary course of slum clearance. With these three helpful measures in operation, considerable progress in improving housing conditions has been, and will continue to be, made.

#### PULMONARY TUBERCULOSIS:—

The number of cases on the register at the end of 1935 was 276. During the year 109 new cases were notified, 4 left the district, 57 died, 23 were struck off as non-tuberculous, and 3 as not requiring further supervision, 2 were re-admitted to the register, 1 was transferred to non-pulmonary, 2 were transferred from non-pulmonary, and there remained, therefore, on the roll at 31st December, 301 patients (males, 178, females, 123).

Particulars of age periods, etc., are as follows:—

		Under 5 years	5-10	10-15	15-25	25-35	35-45	45-65	65 up.	Total.
Sputum not present.	Males, -	—	3	1	9	2	1	2	—	18
	Females.	—	—	1	13	7	1	1	—	23
Sputum present but not examined.	Males, -	—	1	—	—	1	1	1	—	4
	Females	—	—	—	2	—	1	2	—	5
Sputum examined and Tubercle Bacilli found.	Males, -	—	—	—	16	30	12	16	1	85
	Females,	—	1	2	22	18	12	4	—	59
Sputum examined and Tubercle Bacilli never found.	Males, -	—	—	—	13	15	15	25	3	71
	Females,	—	—	2	15	9	6	6	—	36
Total,		—	5	6	88	82	59	57	4	301

In addition 67 patients were under supervision as suspects, and 16 as contacts of known cases.

*Notification.*—One hundred and nine cases (59 males and 50 females) were notified as suffering from pulmonary tuberculosis as against 94 last year and 97 the last five yearly average. The sputum was examined in 77 cases and in 34 cases tubercle bacilli were found to be present.

The age periods are as follows:—

AGE GROUPS.										Number of cases notified during year in which diagnosis of tuberculosis has been confirmed	
	Under 5	5-10	10-15	15-25	25-35	35-45	45-65	65 up.	Total.	Under 15	15 up.
Males,	—	1	5	11	13	10	18	1	59	3	49
Females,	—	4	5	17	10	4	7	3	50	3	34

Twenty-four of these patients died before the end of the year and the average period of survival was 66 days. In addition, 3 left the district, and in 20 the diagnosis was not confirmed.

The following Table shows the home conditions of the notified cases in houses of different sizes, compared with the estimated percentage of such houses in the whole burgh:—

	Number of Cases.	Percentage of Total.	Percentage of Total Houses in the Burgh.
1 Apartment, - - - -	12	11	8
2 Apartments, - - - -	46	42	42
3 Apartments, - - - -	30	27	30
4 Apartments, - - - -	14	13	10
5 Apartments and over, - -	2	2	10
Institutions, Lodginghouses, etc.	5	5	—

*Dispensary.*—The number of persons who attended the dispensary was 243, and 204 X-ray examinations of the chest were carried out.

Of the total new cases examined, 73 were notified before being seen by the Tuberculosis Officer, and 57 were referred for his opinion. Of these 36 were accepted as suffering from tuberculosis, 9 were not accepted, and 12 were still under observation at the end of the year.

*Domiciliary Treatment.*—During the year 131 persons received extra nourishment in the form of milk, eggs or butter.

*Institutional Treatment.*—The following table gives the number of cases treated in the various institutions available to the burgh:—

	Noranside Sanatorium.	Bridge-of-Weir Sanatorium.	Gateside Hospital.	Lanfine Home.	St. Andrew's Home.	Hairmyres Colony.
Number at 1st January, 1936, ..	8	22	7	1	1	1
Admitted during the year, ...	8	29	56	...	...	...
Treated during the year, ...	16	51	63	1	1	1
Total number discharged, ...	8	19	41	...	1	1
Died, ... ..	2	1	6	...	...	...
Remaining at 31st Dec., 1936,	6	31	16	1	...	...

*Home Supervision.*—The nurses of the Greenock and District Nursing Association continued to pay supervisory visits to the patients on the tuberculosis roll. The number not attending the dispensary who were under supervision at the beginning of the year was 14, and the average number over the period was 14.

#### NON-PULMONARY TUBERCULOSIS:—

The number of patients on the register at the end of 1935 was 223. During the year 55 new cases were notified, 24 died, 3 were removed from the roll as non-tuberculous, and 18 as not requiring further supervision, 3 left the district, 2 were transferred to the pulmonary register, and 1 was transferred from the pulmonary register, leaving 229 (111 males and 118 females) on the roll at 31st December.

The age periods and situation of lesions are shown in the following Table:—

LESION.			Under 5 years	5—10 years	10—15 years.	15—25 years	25—35 years	35—45 years	45—65 years	65 upwards	Total
Abdomen, ...	{	Males	1	2	6	3	3	.	..	..	15
		Females	..	5	2	3	3	1	..	..	14
Spine, ...	{	Males	1	4	1	6	3	..	..	..	17
		Females	1	2	1	7	1	1	2	..	15
Bones and Joints, exclusive of spine, ..	{	Males	1	7	11	18	..	2	4	..	43
		Females	1	11	10	13	2	3	2	..	42
Superficial Glands, ...	{	Males	3	3	4	10	1	..	..	..	21
		Females	..	1	10	4	4	..	2	..	21
Lupus, ...	{	Males	..	1	1	1	1	1	..	..	5
		Females	..	1	1	2	3	1	1	..	9
Other Parts or Organs,	{	Males	1	1	2	3	2	1	..	..	10
		Females	1	1	3	2	5	4	..	1	17
Total ...			10	39	52	72	28	16	11	1	229

*Notification.*—The number of cases notified was 55 as against 41 last year and 56 the average for the last five years. Nineteen of these died before the end of the year, the average period of survival being 7 days. In one case the diagnosis was not confirmed, and three left the district during the year.

The following table shows those cases classified according to age groups and situations of lesions:—

LESION.			Under 5 years	5—10 years	10—15 years	15—25 years	25—35 years	35—45 years	45—65 years	65 upwards	Total
Abdomen ...	{	Males	1	..	..	..	..	..	..	..	1
		Females	1	..	1	..	..	..	..	..	2
Spine, ...	{	Males	..	1	1	1	..	..	..	..	3
		Females	..	..	..	..	..	..	..	..	..
Bones and Joints exclusive of Spine ...	{	Males	1	2	..	1	..	..	1	..	5
		Females	1	..	..	..	1	..	..	..	2
Superficial Glands ...	{	Males	1	2	2	3	..	..	..	..	8
		Females	..	..	2	2	1	1	..	..	6
Lupus ...	{	Males	..	..	..	..	..	..	..	..	..
		Females	..	1	..	..	..	..	..	..	1
Other Parts or Organs,	{	Males	5	3	3	..	1	1	..	..	13
		Females	3	2	1	..	2	3	3	..	14
Total, ...			13	11	10	7	5	5	4	..	55

The home conditions of the various notified cases were found to be as follows:—

	Number of Cases.	Percentage of Total.	Percentage of Total Houses in the Burgh.
1 Apartment, - - - -	10	19	8
2 Apartments, - - - -	25	45	42
3 Apartments, - - - -	17	31	30
4 Apartments, - - - -	3	5	10
5 Apartments and over, -	...	...	10
Institutions, Lodginghouses, etc.	...	...	...

*Tuberculous Meningitis:—*

Number of cases discovered,	-	-	-	14
Number of cases notified,	-	-	-	14
Number of deaths,	-	-	-	14

Three of the cases were not notified until after death, one, aged 14 years, two days after death, and two, aged respectively 3 months and 6 years, one day after death. Two cases, aged 9 months and 5 years, were notified on the day of death. The remaining cases were notified at varying periods before death. Of five notified one day before death, the ages were 1 year, 2 years, 3 years, 5 years, and 14 years. One, aged 7 years was notified 2 days before death: one of two years was ill for three days after notification: one, four years old, lived for 8 days, and a child of four months survived for 28 days.

In four of the cases there was discovered a definite family history of tuberculosis. In one a parent was suffering from pulmonary tuberculosis: in another an aunt had been notified as suffering from tuberculosis: and in the remaining two cases there was a brother suffering from an early pulmonary lesion, and the history of an aunt who had died from tuberculosis.

*Dispensary.*—The number of patients who attended the dispensary during the year was 149. Forty-four X-ray examinations were carried out.

Thirty-eight cases were notified before being seen by the Tuberculosis Officer, 20 were referred for his opinion, and of these 17 were accepted as suffering from tuberculosis, 2 were not accepted, while 1 was still under observation at the end of the year.



*Ultra-Violet Light Therapy.*—The mercury vapour lamp was in use throughout the whole of the year for the treatment of tuberculous conditions and actually burned for 430 hours. As has been reported in previous years, the results were satisfactory, more especially in superficial conditions and in mild degrees of abdominal involvement, and also in the improvement of general health. The following conditions were treated:—

Tuberculosis of Superficial Glands,	-	-	25
Tuberculosis of Skin,	-	-	6
Tuberculosis of Bones and Joints,	-	-	3
Tuberculosis of Abdomen,	-	-	15
General Debility,	-	-	7

*Domiciliary Treatment.*—During the year 53 cases received extra nourishment; details are given later.

*Home Supervision.*—The number of patients not attending the dispensary who were under home supervision by the visiting nurses was 9 at 31st December, the average number during the year being 10.

*Institutional Treatment.*—The following table gives the numbers treated in the various institutions:—

	St. Andrew's Home, Millport.	Noronside Sanatorium.	Gateside Hospital.
Number at 1st January, 1936,	29	...	1
Admitted during the year,	12	1	4
Treated during the year,	41	1	5
Discharged during the year,	13	...	4
Died,	1	...	...
Remaining at 31st Dec., 1936,	27	1	1

#### ALL TUBERCULOSIS:—

The number on the tuberculosis roll at the end of the year was 530. The number of persons who attended the dispensary was 500, and the total attendance amounted to 4,306 as against 3,824 last year, and 3,528 the average for the last five years.

The detail was as follows:—

Type of Case.	Number of Patients.	Primary Visits.	Re-visits.
Pulmonary, . . . . .	243	69	1,621
Non-Pulmonary, . . . . .	149	27	2,297
Suspect, . . . . .	92	70	252
Contact, . . . . .	16	7	136
Total, . . . . .	500	173	4,306

The number of patients visited in their homes was 672, and the total supervisory visits paid amounted to 4,986. The number of persons who received extra nourishment was 184 as against 193 last year, and 167 the last five yearly average. The total cost of this service was £804.

The number of prescriptions paid for by the Local Authority under the scheme was 394, and the total cost £26 7s. 11d. The number of persons who received these prescriptions was 129, and the average cost per person was 4/1.

In addition to the above, 79 patients received assistance through the Renfrewshire King Edward Memorial Fund as follows:—

Clothing, . . . . .	30
Rent, . . . . .	47
Dental Treatment, . . . . .	4
Blankets, . . . . .	2
Bed and Bedding, . . . . .	15
Spectacles, . . . . .	1
Milk, . . . . .	1

## MATERNITY SERVICE AND CHILD WELFARE SCHEME.

In 1936 the maternal death-rate, as estimated in this department, was 7.34 per 1,000 registered births, which is lower than last year's 7.67, but higher than the last quinquennial average of 6.52.

The rate for all Scotland, which is computed from the Registrar General's figures, is 5.6, and the rate for Greenock comparable to this is 6.1.

The infantile mortality rate is 101, which is considerably higher than last year's figure of 92 and the quinquennial average of 97.

In neither of these figures is there any ground for complacency, and every practicable means of improving the chances of survival of mothers and children must be taken if the future is to be assured. The Local Authority is providing excellent services, and it is the duty of the community to take full advantage of these for its own good, to follow the advice given and benefit from the teaching provided. No matter how good the services may be, the results depend on the honesty, care and commonsense of those for whom they are maintained.

The number of expectant mothers attending the ante-natal clinics during 1936 was 1,118, which is equivalent to 68 per cent. of the total registered births, and approximately the same as last year: this is fairly satisfactory, but can yet be considerably improved upon.

An extension of the arrangements for convalescent home treatment of mothers was made whereby expectant mothers who are debilitated from any cause can be sent to the Coast Mission Homes, Saltcoats, to recoup their strength before confinement.

After considerable investigation it was decided to institute as an experiment a toddlers' playground in conjunction with, and in the grounds of, Craigieknowes Clinic, and the promise of a grant for this purpose was received from the Commissioner for Special Areas. The work was under way at the end of the year.

The Department has again to thank the Inspectors of the R.S.S.P.C.C. for their continued co-operation and help.

#### SURVEY OF ARRANGEMENTS FOR MATERNAL WELFARE.

Following on the issue of Circular N.M. & C. No. 42/1935 by the Department of Health, a survey of the Local Authority's arrangements for maternal welfare was carried out by a consultant obstetrician and the Medical Officer of Health, and is printed in full below :—



## MATERNAL WELFARE.

Report by Consulting Obstetrician and Medical Officer of Health as recommended by the Department of Health for Scotland in Circular N.M. & C. No. 42/1935.

## THE PROBLEM.

**Births.—**

1. Number of births notified during 1935 (including 83 stillbirths),	- - - - -	1754
2. Number of notified births attended during labour by midwife only,	- - - - -	1085
3. Number of notified births attended during labour primarily by midwife, and to which doctor was called by midwife in emergency,	- - - - -	208
4. Number of notified births attended during labour primarily by midwife, then by doctor in emergency, and finally sent to maternity hospital,	- - - - -	32
5. Number of notified births attended during labour doctor only, or by doctor and midwife acting as nurse,	- - - - -	231
6. Number of notified births attended during labour by doctor and sent by him to maternity hospital,	- - - - -	8
7. Number of births conducted in private institutions (practically all of these were attended by doctors with midwife present in capacity of nurse),	- - - - -	31
8. Number of notified births in which the labour was conducted or completed in the maternity hospital (this figure includes Nos. 4 and 6 above),	- - - - -	199
Number of births in which labour was conducted entirely in hospital,	- - - - -	159
Number of births attended outside by doctors and sent to hospital on account of difficulty (No. 6 above),	- - - - -	8
Number of births in which labour was attended outside by midwife, then by doctor in emergency, and then sent to hospital (No. 4 above),	- - - - -	32

**Maternal Deaths.—**

These in 1935 numbered 18 and may be divided as follows:

Connected with pregnancy and parturition,	- - - - -	13
Toxaemia,	- - - - -	5
Post-abortion sepsis,	- - - - -	3
Septicaemia (after Caesarean section),	- - - - -	2
Eclampsia and heart disease,	- - - - -	1
Post-partum haemorrhage,	- - - - -	1
Puerperal shock,	- - - - -	1

Associated with but not directly connected with pregnancy and parturition,	-	-	-	-	-	-	5
Heart Disease,	-	-	-	-	-	-	2
Lobar Pneumonia,	-	-	-	-	-	-	1
Intestinal obstruction,	-	-	-	-	-	-	1
Epilepsy,	-	-	-	-	-	-	1

The approximate maternal death-rate for 1935 is, 7.72, composed of sepsis 2.97, other puerperal deaths 4.75.

The average maternal death-rate for the five years 1930-1934 was 6.4 (Registrar General), or 6.14 (Medical Officer of Health).

### Maternal Morbidity.—

The following are the numbers of cases notified during 1935 :

Puerperal Fever,	-	-	-	-	-	-	1
Puerperal Pyrexia,	-	-	-	-	-	-	12

and, as shown above, the number of deaths from sepsis was 5. Of these 13 cases the number occurring in the practice of midwives was 5, all of whom recovered.

### THE PRESENT ARRANGEMENTS.—

#### Staff.—

One whole-time lady medical officer is in charge of the maternity and child welfare scheme. There are two surgeon-accoucheurs (in general practice in the burgh of Greenock) who conduct the maternity hospital for three months alternately and act as consultants for maternity work in the burgh. There is one part-time dental surgeon who carries out necessary dental treatment for expectant and nursing mothers. The six whole-time and four part-time Health Visitors on the staff assist in the work.

There are 30 practitioners working in the town in private practice, and 28 practising midwives.

#### Clinics.—

##### 1.—*Ordinary Ante-Natal Clinic.*—

There are two clinic buildings, one centrally placed and the other in the east-end of the town.

Two ante-natal sessions are held weekly in each of these premises. The clinic attendance card shows clearly a list of abnormal symptoms that fall to be reported.

Number of expectant mothers who attended during 1935, - 1161

Number of first attendances, - - - - 966

Number of subsequent attendances, - - - 3565

Thus 55 per cent. of all expectant mothers and 60 per cent. of midwives' cases receive supervision at these clinics.

The standard of ante-natal supervision approximates closely, in quantity at least, to that recommended in the Report on Maternal Morbidity and Mortality in Scotland.

When an expectant mother defaults from her attendance at the ante-natal clinic she is visited by a health visitor to find out the reason for default, and to persuade her to return if no physical disability is present.

A health visitor also visits all cases when the midwives booked report refusal to attend the ante-natal clinic or obtain medical advice. Many of these are persuaded to attend or call in their own doctor.

Arrangements are in force whereby the ante-natal record of cases booked for admission to the maternity hospital at the ante-natal clinic is available in the hospital before the admission of the patient.

## 2.—*Consultant Ante-Natal Clinic.*—

This clinic is conducted by the Surgeon-Accoucheur who is not for the time being on duty for the maternity hospital, and is held once per fortnight. To it are sent some of the cases who are booked for the maternity hospital at the ordinary ante-natal clinic, and any other cases in which the Medical Officer wishes a second opinion. It is also open to medical practitioners in the town to send any of their ante-natal cases on which they desire a second opinion.

The attendances during 1935 were as follows:—

Cases from the ordinary ante-natal clinic, - - 74

Private doctors' cases, - - - - 0

## 3.—*Post-Natal Clinic.*—

This is a special clinic where all mothers who have had the perineum stitched at confinement are asked to attend for supervision by the Medical Officer, along with any mothers who, on questioning by the Health Visitor at her first visit after the confinement are found to have any abnormality or disability following childbirth.

Number of mothers who attended during 1935, - 76

Number of attendances, 95.

#### 4.—*Dental Clinic.*—

A dental session is held once per week to deal with dental conditions. The following are figures for 1935:—

Number of expectant mothers treated, - - -	78
Number of nursing mothers treated, - - -	117

#### **Hospital Provision.**—

##### (I).—*Maternity Hospital.*—

This hospital at present consists nominally of 6 beds and is staffed by a matron and two nurses. The Assistant Medical Officer of Health for maternity and child welfare resides there, but the only duty imposed upon her is to act in emergency in the absence of the Surgeon Accoucheur.

The following are some details regarding the work done:—

	1933.	1934.	1935.
Number of admissions, - - - - -	180	202	230
Number of ante-natal cases admitted, - - -	43	45	34
Number of labours conducted, - - - - -	154	166	201
Number of abnormal and complicated labours, - -	49	59	74
Number of cases in which forceps were used, -	16	14	25
Number of Caesarean sections, - - - - -	5	3	6
Number of cases in which version was performed, -	6	8	4
Number of cases of surgical induction of labour, -	2	1	1

##### (II).—*Convalescent Home.*—

For some time ailing and tired mothers after confinement have been sent to the Mission Coast Homes, Saltcoats, when necessary, and recently arrangements have also been made to admit expectant mothers.

The number of mothers so admitted during 1935 was 27—all post-natal.

##### (III).—*Infectious Diseases Hospital.*—

Cases of puerperal fever or puerperal pyrexia are admitted to Greenock and District Combination Infectious Diseases Hospital.

The number of cases so admitted during 1935 was:—

Puerperal Fever, . - - - - -	1
Puerperal Pyrexia, - - - - -	6

## Provision of Medical and Midwifery Services.—

### *Doctors.—*

As is general, any midwife can call in a doctor to her aid in emergency at the expense initially of the Local Authority. This was done during 1935 on 557 occasions, and the emergencies can be classified as follows:—

#### *Ante-Natal.*

Ante-partum haemorrhage, 34; eclampsia, 2; illness of mother, 42; oedema, 9; threatened and complete abortion, 44.

#### *Intra-Natal.*

Abnormal presentation, 50; adherent placenta, 9; contracted pelvis, 24; delayed labour, 85; maternal distress, 9; prolapse of cord, 1; torn perineum, 116; uterine inertia, 4.

#### *Post-Natal.*

Illness of mother, 15; pyrexia, 14; post-partum haemorrhage, 12.

#### *Child.*

81.

From information gathered from the doctors' accounts, it was found that in 212 labours completed by doctors during a period of eighteen months in 1934-35 forceps were used as follows:—

Number of labours, - - - - -	212
Number in which forceps were used, - -	87
Number in which forceps were <b>not</b> used, -	40
Number in which, from the information available, it was not possible to say whether forceps were used or not, - - - -	85

### *Midwives.—*

The Corporation provides free of charge in necessitous cases the services of a midwife on the following conditions:—

1. That no maternity benefit is payable.
2. That application must be made to the Medical Officer of Health before the end of the seventh month of pregnancy.
3. That the patient must attend the corporation ante-natal clinic.

During the year 1935 there were 778 applications received, and of these 523 were granted.



The Corporation also provides the free services of a midwife in necessitous cases on the occasion of abortion. Forty-four abortions are known to have occurred during 1935 but no satisfactory information regarding the cause is available. In certain circumstances also the Corporation pays compensation to midwives when their cases are removed to hospital.

#### *Consultants.—*

In addition to the consultant clinic already mentioned, the services of the maternity hospital surgeon-accoucheurs are available as consultants to any of the doctors in practice if they wish a second opinion, or assistance in any ante-natal, intra-natal, or post-natal difficulty. This service has only been taken advantage of on two occasions since February 1935, when it was instituted, the large majority of cases in which difficulty was experienced being sent into hospital.

#### *Provision of Food and Milk.—*

In necessitous cases the Corporation, when considered necessary by the Medical Officer, provides milk during the last three months of pregnancy and up to ten months after confinement, providing the mother continues breast feeding, and eggs and butter during the two months before confinement and the month thereafter. The amount allowed is one pint of milk per day, one egg per day, and one  $\frac{1}{2}$ -lb butter per week, renewable each month.

The following are the figures for 1935:—

Number of expectant mothers who received milk, - - -	386
Number of expectant mothers who received milk and eggs, -	70
Number of expectant mothers who received milk and butter, -	71
Number of expectant mothers who received milk, butter & eggs, -	7

These foodstuffs are normally provided only when the mother attends regularly for ante-natal supervision, but are available also in cases where the mother is definitely unable to attend.

#### **Miscellaneous Provisions.—**

1.—Midwives' practice is supervised as far as practicable, all necessary examinations and disinfections being carried out, along with suspension from practice when considered advisable. This last measure, however, seldom requires to be put into force.

2.—All maternal deaths, and cases of puerperal fever and pyrexia are thoroughly investigated and appropriate action is taken where possible.

3.—Arrangements are in force whereby skilled nursing services at home will be provided in any case of puerperal fever or puerperal pyrexia when it is not possible to remove the patient to hospital. This has never been requested by any doctor.

4.—All necessary bacteriological examinations are carried out by the Medical Superintendent of the Infectious diseases Hospital.

5.—Arrangements have been made whereby in emergency patients from the maternity hospital can be admitted after confinement to Greenock Royal Infirmary to prevent gross overcrowding in the former institution.

6.—Antiscarlatinal serum is available to any doctor for use as a prophylactic measure in cases where he anticipates complications.

7.—All necessary medicines are provided free of charge in necessitous cases.

8.—Sheets, cotton wool and disinfectant are provided free in necessitous cases to allow of the labour being carried out in as cleanly a manner as possible.

9.—Ambulances run by the Police Department are available for any cases requiring them, and although everybody is liable for payment, no charge is normally made in necessitous cases.

10.—Necessary railway fares are paid where the patient is unable to pay these herself.

11.—A Birth Control Clinic carried on by a voluntary association meets in the central clinic premises, and cases are referred there when medical reasons dictate that course.

#### COMMENTS AND RECOMMENDATIONS.—

The problem of maternal welfare in Greenock, and the present arrangements for dealing with it, have been fully studied in the light of the Conclusions and Recommendations of the Report on Maternal Morbidity and Mortality in Scotland, and we have the following comments and recommendations to make:—

1.—The scheme for the provision of midwifery services in necessitous cases should be amended to substitute three months instead of two for the period of ante-natal supervision in the conditions under which a midwife's services are granted by the Corporation free of charge.

2.—The maintenance of an emergency unit to deal with cases too ill for removal to hospital is eminently desirable, but is not practicable under present circumstances. Such a unit should be arranged for as soon as the new maternity hospital is in operation.

3.—Complete continuity of medical service during the ante-natal, intra-natal, and post-natal periods is not possible of achievement in the majority of cases. The ante-natal clinic record of patients attending the local authority ante-natal clinic, however, is at present available at the maternity hospital, where the patient is booked for admission. Arrangements could be made to render the record of any individual patient available to a medical practitioner who may be called in by the midwife, but would be of such limited scope as to render the procedure of very little real value.

4.—We are not satisfied that voluntary notification of pregnancy would serve any very useful purpose. At present the forms sent in by midwives in cases of neglect or refusal by the patient to obtain medical advice, and the applications for assistance at confinement in necessitous cases virtually give the Medical Officer of Health notification of pregnancy in more than half of the cases attended by midwives.

Midwives should be encouraged to report their bookings to the Medical Officer of Health to allow of investigation of the home conditions and decision as to the place of confinement.

5.—We have considered the question of a Home Help System, but feel that, under the circumstances envisaged in the Report, the patient would be better under treatment in ante-natal or general hospital wards.

6.—We feel that, where possible, abortions are better treated elsewhere than in maternity hospitals, and the present practice whereby these are treated at home or in the voluntary hospital seems to us to be definitely safer.

7.—We are of opinion that tired and ailing expectant mothers are better treated in the ante-natal wards of a maternity hospital than at distant convalescent homes. At



present this is not possible, and arrangements are in force to send such cases when occasion requires to the Mission Coast Homes, Saltcoats well before confinement is due.

8.—Co-operation with the local midwives is desirable, and we are of opinion that periodic demonstrations in hospital methods would be helpful. This will only be possible when the new maternity hospital is in operation.

The provision of a real Local Authority midwifery service seems to us to involve questions that can only be dealt with satisfactorily by the Central Authority.

9.—We are of opinion that a recommendation should be sent to all practising doctors that the consultant obstetricians should be called in to give an opinion before high forceps operations, craniotomy, or version (except for the control of haemorrhage) are carried out.

10.—We do not favour the routine examination of all mothers six weeks after confinement, but are of opinion that the present method whereby health visitors at their first visit advise all those who had any perineal repair carried out at the time of labour to come to the post-natal clinic for examination, along with any who, on being asked, admit the presence of even slight abnormality.

11.—The elimination of the handywoman is a very difficult matter, but it might be possible to achieve this, in part at least, by the Local Authority providing the services of a midwife in the case of patients whose income is over the scale of necessity presently fixed, and who have engaged a doctor and a handywoman, but are unable to afford a midwife also. The Local Authority would in such cases require to be satisfied that efficient ante-natal supervision is being carried out and that the handywoman was to have no part in the treatment of the mother.

12.—We are of opinion that the two medical practitioners acting as Surgeon Accoucheurs to the maternity hospital and as consultants to general practitioners in the burgh, although they do not fulfil the conditions laid down in circular 42/1935, are, from their wide experience in obstetrics, amply fitted for that work, and that their services should be continued. We recommend, however, that an outside consultant of the qualifications required should be arranged for in addition to these officers, to be called in by them when occasion demands.

13.—Investigation regarding the presence of infectious conditions in the household of the puerperal woman should be made by the Health Visitor at her first visit, and appropriate action taken.

14.—The present maternity hospital is quite inadequate to deal with the number of patients requiring in-patient treatment. With regard to the new hospital presently in the course of construction, we have the following recommendations to make:—

(a) An attempt should be made to have this hospital recognised as a training school for midwives.

(b) It should have a resident obstetrician, who should conduct some, at least, of the ante-natal clinics in the burgh, thereby achieving continuity of service in a proportion of the patients admitted.

(c) The pupil midwives should carry out under supervision the confinements of necessitous cases in the burgh in order that they may thus achieve their full course of training.

(d) Approximately one-third of the beds should be reserved for ante-natal cases, one-sixth for suspect and doubtful cases, one-sixth for abortions if they require to be admitted, and the remainder for normal cases.

15.—We consider that the imposition of a condition to the payment of maternity benefit requiring proof of satisfactory ante-natal supervision is desirable, but that this is a matter for the Central Authority.

16.—We feel that it would be of great advantage if the Department of Health for Scotland were to transmit to the Medical Officer of Health the comments of their experts on the investigations into maternal deaths in order that he could then take any action that seemed appropriate under the circumstances.

(Sgd.) S. J. CAMERON,  
Consultant Obstetrician,

(Sgd.) A. JOHNSTONE,  
Medical Officer of Health.

Public Health Department,

Greenock, 19th February, 1936.

The comments and recommendations contained in the survey were carefully considered by the Corporation and were generally approved. Paragraphs 1, 12, and 16 were put into immediate operation with the proviso in regard to paragraph 12 that no specific appointment be made, but that the local consultants be empowered to call in a consultant of the necessary qualifications and status as and when his services are considered necessary, and in regard to paragraph 16, that the Medical Officer of Health be authorised, in the event of the Department failing to transmit the comments of their experts on maternal death investigations, to submit the latter to a consultant obstetrician for his observations, and to pay a suitable fee for these services.

Paragraphs 5 and 11 were considered together, and in view of the practical difficulties found to be involved in carrying out the recommendations in paragraph 11, it was decided to give a trial of a year to a Home Help Scheme, the details of which are given below.

With regard to paragraph 14 (a), it was agreed that only nurses with a certificate of general training be eligible for training as midwives in the new hospital.

#### SCHEME FOR THE PROVISION OF HOME HELPS.

(1)—A list of names will be kept at the Public Health Department of persons suitable for domestic work. Care will be taken in the selection of the women both as to character and competency, but no responsibility for their conduct can be taken by the Department. They will be given duty in rotation.

(2)—The services of a Home Help will normally be available during the lying-in period for fourteen days, but this may be extended if found necessary.

(3)—The charge for the services of a Home Help will be made in accordance with a sliding scale depending on the income of the household. Information regarding the charge to be made in any particular case can be had from the Public Health Department, 4 Terrace Road. The minimum charge for any household will be 9d. per day.

(4)—Applications for a Home Help should be made to the Public Health Department not less than a month before her services are required, but only after a doctor or midwife has been engaged.

Such charge as falls to be made must be paid to the Public Health Department when the application for a Home Help is made.

(5)—The Home Help will be paid by the Corporation after proof of satisfactory service, and provided no payment or gratuity has been made by the household where she was employed.

(6)—Where a Home Help is found inefficient or unsatisfactory in any respect, the circumstances must be reported to the Medical Officer of Health as soon as possible. Any conduct on the part of a Home Help contrary to the interests of the household where she is employed may lead to her name being removed from the list.

(7)—The duties of a Home Help will be generally as follows:

(a) She shall attend between the hours of 8 a.m. and 6 p.m. with not more than two periods off, amounting in all to two hours. She shall attend daily, Sunday excepted, save where Sunday occurs within four days after confinement.

(b) She shall keep the house clean, do cooking and washing (except arrears of washing) and undertake general supervision of the children.

(c) She shall supply her own food.

(d) If she comes into contact with any infectious condition she must report at once to the Medical Officer of Health.

(e) She shall not interfere in any way with the instructions of the doctor or midwife, nor take any part in the special nursing of the mother and baby. She shall, however, carry out such ordinary nursing duties of a general nature as are required.

(f) When her services are required she will receive a written order from the Public Health Department stating the name and address of the household, and giving the approximate date when her services will be required. Following upon this she shall visit the house and make arrangements for being called when required.

## SLIDING SCALE OF INCOME AND CHARGES.

SIZE OF FAMILY.		INCOME OF FAMILY.									
No. of Adults	No. of Children										
1	0	15/-	19/-	23/-	27/-	30/6	34/-	37/6	41/-	44/6	
	1	18/6	22/6	26/6	30/6	34/-	37/6	41/-	44/6	48/-	
	2	22/-	26/-	30/-	34/-	37/6	41/-	44/6	48/-	51/6	
	3	25/6	29/6	33/6	37/6	41/-	44/6	48/-	51/6	55/-	
	4	29/-	33/-	37/-	41/-	44/6	48/-	51/6	55/-	58/6	
	5	32/6	36/6	40/6	44/6	48/-	51/6	55/-	58/6	62/-	
	6	36/-	40/-	44/-	48/-	51/6	55/-	58/6	62/-	65/6	
	7	39/6	43/6	47/6	51/6	55/-	58/6	62/-	65/6	69/-	
2	0	26/-	30/-	34/-	38/-	42/-	46/6	51/-	54/6	60/-	
	1	29/6	33/6	37/6	41/6	45/6	50/-	54/6	58/-	63/6	
	2	33/-	37/-	41/-	45/-	49/-	53/6	58/-	61/6	67/-	
	3	36/6	40/6	44/6	48/6	52/6	57/-	61/6	65/-	70/6	
	4	40/-	44/-	48/-	52/-	56/-	60/6	65/-	68/6	74/-	
	5	43/6	47/6	51/6	55/6	59/6	64/-	68/6	72/-	77/6	
	6	47/-	51/-	55/-	59/-	63/-	67/6	72/-	75/6	81/-	
	7	50/6	54/6	58/6	62/6	66/6	71/-	75/6	79/-	84/6	
Charge,		9d per day	1/6 per day	2/- per day	2/6 per day	3/- per day	3/6 per day	4/- per day	4/6 per day	5/- per day	

## CONDITIONS OF SERVICE AND DUTIES OF HOME HELPS.

(1)—A list of names will be kept at the Public Health Department of women selected as suitable for domestic work under the scheme for the provision of Home Helps in confinement cases. Those whose names are on this list will be given work in rotation.

(2)—The services of a Home Help will normally be required for fourteen days in each case, but this period may be curtailed or extended as found necessary.

(3)—A Home Help will be paid by the Corporation on production of the written order referred to later at the rate of 5/- per day (less insurance contributions) after proof of satisfactory service, and provided no payment or gratuity has been made by the household where she was employed.

Bus fares will be allowed where these amount to 2d or over for each single journey.



(4)—Any conduct on the part of a Home Help contrary to the interests of the household where she is employed may lead to her name being removed from the list.

(5)—The duties of a Home Help will be generally as follows:

(a) She shall attend between the hours of 8 a.m. and 6 p.m. with not more than two periods off, amounting in all to two hours. She shall attend daily, Sunday excepted, save where Sunday occurs within four days after confinement.

(b) She shall keep the house clean, do cooking and washing (except arrears of washing) and undertake general supervision of the children.

(c) She shall supply her own food.

(d) If she comes into contact with any infectious condition she must report at once to the Medical Officer of Health.

(e) She shall not interfere in any way with the instructions of the doctor or midwife, nor take any part in the special nursing of the mother and baby. She shall, however, carry out such ordinary nursing duties of a general nature as are required.

(f) When her services are required she will receive a written order from the Public Health Department stating the name and address of the household, and giving the approximate date when her services will be required. Following upon this she shall visit the house and make arrangements for being called when required, and immediately she has taken up duty she shall send a postcard (which will be provided) to the Medical Officer of Health stating that her work has commenced. If, however, she is not free to undertake the case at the time required, she should communicate forthwith on receipt of the order, with the Medical Officer of Health.

Public Health Department

Greenock, 1st September, 1936.



## BIRTHS:—

Number registered (corrected)	{ Legitimate, 1,541 Illegitimate, 93 }	(1,708)	1,634
Number notified, - - - - -		(1,752)	1,684
Number of births classified according to nature of attendance:—			
Medical Practitioner, - - - - -	( 252 )		264
Midwife, - - - - -	(1,310)		1,202
Institution - - - - -	( 189 )		218
Percentage of notified births visited, - - - - -			88.07

## STILLBIRTHS:—

Number of stillbirths (births of dead children), - - (83) 78

Under this heading are included all the births of dead children after the expiry of the seventh month of pregnancy. Seventy-eight cases were notified, of which 30 occurred in the maternity hospital where abnormal cases are treated.

Each of the stillbirths was investigated as it occurred. From the investigation the following facts were elicited:—

## (1) Age of Mother.—

Under 20, 2; 20-24, 15; 25-29, 20; 30-34, 16; 35-39, 12; 40 and over, 13.

## (2) Number of Pregnancy.—

First, 27; second, 9; third, 8; fourth, 3; fifth, 8; sixth, 5; seventh, 5; eighth, 2; ninth and over, 11.

## (3) Duration of Pregnancy.—

7 months, 17; eight months, 11; 9 months, 50.

## (4) Nature of Attendance.—

Midwife, 24; Doctor, 24; Midwife, Doctor and Institution, 12; Doctor and Institution, 18.

## (5) Presentation.—

Vertex, 45; Breech, 20; Foot, 1; Face, 2; Transverse, 3; Occipito-posterior, 7.

## (6) Nature of Interference.—

No interference, 45; Forceps, 16; Forceps and version, 4; Version, 3; Manual delivery, 8; Induction, 2.

Note:—The figures in italics are the average figures for the last five years.

## (7) Condition of Child.—

Normal, 38; Macerated, 22; Abnormality, 12; Premature, 6.

## (8) Condition of Placenta.—

Healthy, 49; Unhealthy, 27; Adherent, 2.

## (9) Ante-Natal health of Mother.—

Good, 31; Fair, 16; Poor, 22; Not known, 9.

## (10) Ante-natal Supervision.—

Ante-natal clinic, 33; Doctor or Midwife, 29; Inadequate supervision, 5; no supervision, 11.

## (11) Causal Factors.

(1) Ante-natal deaths,	-	-	-	-	-	-	43
Ante-partum haemorrhage,	-	-	-	-	-	11	
Renal conditions,	-	-	-	-	-	13	
Illness of Mother,	-	-	-	-	-	6	
Venereal conditions,	-	-	-	-	-	1	
Gynaecological conditions,	-	-	-	-	-	2	
Hydramnios,	-	-	-	-	-	1	
No obvious cause,	-	-	-	-	-	9	
(2) Intra-natal deaths, obstetrical difficulty,	-	-	-	-	-	27	
Delayed labour,	-	-	-	-	-	7	
Contracted pelvis,	-	-	-	-	-	6	
Prolapse of cord,	-	-	-	-	-	4	
Abnormal presentation,	-	-	-	-	-	10	
(3) Abnormality of Child,	-	-	-	-	-	8	

## ABORTIONS.—

Forty-six abortions were investigated as far as practicable. The causes elicited were as follows:—

Maternal strain or injury,	-	-	10
Illness of mother,	-	-	3
Venereal Disease,	-	-	1
Cause unknown,	-	-	32

## INFANTILE MORTALITY.—

Number of deaths of children under 1 year,	-	-	(166)	165
Rate per 1,000 births,	-	-	(97.73)	100.97

Number of deaths and rates per 1,000 births classified according to age groups and causes of death:—

Note:—The figures in italics are the average figures for the last five years.

CAUSES OF DEATH.	AGE GROUPS.					Total Deaths.	Rate per 1,000 Births.
	Under 1 week	1—4 weeks.	4 weeks—3 months.	3 months—6 months.	6 months—12 months.		
Chickenpox, ... ..	...	...	...	..	...	..	1.22
Measles, ... ..	...	...	...	1	1	2	1.22
Scarlet Fever, ... ..	...	..	..	...	...	...	...
Whooping Cough, ... ..	...	...	...	...	1	1	0.61
Diphtheria and Croup, ... ..	...	...	...	...	...	...	...
Erysipelas, ... ..	...	...	...	...	...	...	...
Tuberculous Diseases, ... ..	...	...	...	2	1	3	1.84
Meningitis (non-tuberculous), ... ..	...	..	1	..	...	1	0.61
Hydrocephalus, ... ..	...	...	...	1	...	1	0.61
Convulsions, ... ..	...	1	...	2	...	3	1.84
Pneumonia (all forms), ... ..	...	5	7	10	13	35	21.42
Bronchitis, ... ..	...	3	...	...	2	5	2.06
Diarrhoea and Enteritis, ... ..	...	1	4	8	9	22	13.46
Other Digestive Diseases, ... ..	...	..	...	...	3	3	1.84
Congenital Malformations, ... ..	1	1	2	1	1	6	3.67
Congenital Heart Disease, ... ..	...	...	...	...	...	...	...
Premature Birth, ... ..	17	8	2	...	...	27	16.53
Atrophy, Debility, & Marasmus ... ..	20	5	9	6	...	40	24.47
Atelectasis, ... ..	1	...	...	...	...	1	0.61
Injury at Birth, ... ..	2	...	...	...	..	2	1.22
Suffocation, Overlaying, ... ..	...	...	...	...	...	...	...
Syphilis, ... ..	...	...	...	...	...	...	...
All other Causes, ... ..	...	1	6	2	4	13	7.96
Total Deaths, ... ..	41	25	31	33	35	165	
Rate per 1000 Births, ... ..	25.09	15.30	18.97	20.19	21.42		100.97

This Table is compiled from the corrected number of deaths (Registrar General).

#### MATERNAL MORTALITY :—

Number of deaths resulting from or associated with pregnancy or confinement, (15) 18

Number of deaths resulting from puerperal sepsis (details will be found under deaths and death-rate), - - - - - (3) 3

Maternal death-rate (Public Health Department, - - - - - (6.52) 7.34

#### HOME VISITATION :—

##### (1) Infants :—

Number of children visited, - - -	(2,500)	2,420
Number of first visits, - - -	(1,624)	1,563
Number of re-visits, - - -	(1,749)	18,167

Note:—The figures in italics are the average figures for the last five years.

Number of Infants at age of 6 months:—

(i)	Breast fed,	-	-	-	(669)	601
(ii)	Partially breast fed,	-	-	-	(106)	127
(iii)	Artificially fed,	-	-	-	(458)	529

Number of infants born:—

(i) Prematurely,	-	-	-	(24)	19
(ii) At full time,	-	-	-	(1,692)	1,665

(2) Children (1-5 years):—

Number of children visited,	-	-	(6,722)	6,754
Number of first visits,	-	-	(24)	20
Number of re-visits,	-	-	(23,292)	25,554

(3) Expectant Mothers:—

Number of first visits,	-	-	-	(178)	588
Number of re-visits,	-	-	-	(13)	5

(4) Nursing Mothers:—

Number of first visits,	-	-	-	(56)	160
Number of re-visits,	-	-	-	(30)	1

ANTE-NATAL CONSULTATIONS:—

Two session of two hours weekly are held at Terrace Road, Clinic, and two similar sessions are held at Craigieknowes Clinic.

Total number of expectant mothers attending,	(970)	1,118
Total number of attendances, {First, - - (823)		1,006
{Subsequent, (2,351)		4,125

Classified summary of conditions found:—

Conditions directly connected with pregnancy:—

Abnormal presentation, 96; albuminuria, 133; contracted pelvis, 22; doubtful pregnancy, 12; oedema, 46; threatened abortion, 11.

Anaemia and debility, 234; cardiac conditions, 26; dental conditions, 132; digestive conditions, 76; ear, nose and throat conditions, 30; eye conditions, 14; genito-urinary conditions, 2; glandular conditions, 1; gynaecological conditions, 54; nervous conditions, 5; no abnormality—advice given, 320; respiratory conditions, 88; septic conditions, 17; skin conditions, 30; tuberculous conditions, 2; varicose veins, 66; venereal diseases, 17.

Consultant Ante-Natal Clinic:—

Number of expectant mothers attending, - - - 104

Classified summary of conditions found:—

Abnormal presentation, 14; albuminuria, 4; contracted pelvis, 16; disseminated sclerosis, 1; haemorrhage, 1; hydramnios, 2; no abnormality, 58; oligo-hydramnios, 1; presentation doubtful, 3; retroverted gravid uterus, 1; twins and hydramnios, 3.

Note:—The figures in italics are the average figures for the last five years.

## POST-NATAL AND OTHER CONSULTATIONS:—

Two sessions weekly of two hours are held in Terrace Road Clinic, and two similar sessions are held in Craigieknowes Clinic.

Number of attendances,	First, - - -	(491)	478
	Subsequent, - - -	(721)	655

## Classified summary of conditions found:—

Anaemia and debility, 212; cardiac disease, 2; dental conditions, 146; digestive conditions, 75; ear, nose and throat conditions, 14; epilepsy, 1; exophthalmic goitre, 1; eye conditions, 23; genito-urinary conditions, 5; gynaecological conditions, 43; injury, 1; nervous conditions, 4; no abnormality—advice given, 175; phlebitis, 1; respiratory conditions, 36; rheumatism, 16; septic conditions, 50; skin conditions, 22; varicose veins, 2; venereal diseases, 11.

## Special Post-Natal Clinic:—

One session weekly is held in Terrace Road Clinic.

Number of mothers attending,	- - - - -	97
Number of first visits, 97, {	- - - - -	
Number of revisits, 76, {	- - - - -	173

## Classified summary of conditions found:—

Gynaecological conditions, 5; lacerated cervix, 5; mastitis, 2; no abnormality, 5; others, 15; post-partum debility, 18; pregnant, 4; rectocele and cystocele, 12; sub-involution of uterus, 9; sutured perineum, satisfactory, 15, unsatisfactory, 2; uterine displacement, 3; venereal, disease, 2.

## CONSULTANT SERVICES:—

Under this service arrangements are in force whereby any medical practitioner can have the services of the maternity hospital surgeon-accoucheurs in a consultant capacity in any ante-natal, intra-natal, or post-natal difficulty.

Number of consultations,	- - - - -	4
Abnormal placenta,	- - - - -	1
Pelvis cellulitis,	- - - - -	1
Placenta praevia,	- - - - -	1
Adherent placenta,	- - - - -	1

## CHILD WELFARE CONSULTATIONS:—

Two sessions of two hours are held weekly in Terrace Road Clinic, and two similar sessions are held in Craigieknowes Clinic

## Total number of children attending:—

Under one year of age, }	at 30th June, 1936, {	(1,124)	1,206
Over one year of age, }		(948)	956

## Number of first attendances:—

Under one year of age,	- - -	(919)	844
Over one year of age,	- - -	(182)	120

Note:—The figures in italics are the average figures for the last five years.



## Total number of attendances:—

Under one year of age, - - -	(7,509)	9,466
Over one year of age, - - -	(4,362)	4,764

## Illnesses recorded:—

Accidents, 46; anaemia and debility, 297; bone conditions, 1; cardiac conditions, 3; congenital deformity, 39; dental conditions, 110; digestive diseases, 212; ear, nose and throat conditions, 145; eye conditions, 103; genito-urinary conditions, 36; glandular conditions, 43; hernia, 31; Hirschsprung's disease, 1; infectious conditions, 122; jaundice, 2; mental deficiency, 4; no abnormality—advice given, 633; no abnormality—vaccination performed, 115; paralysis, 7; phimosis, 13; respiratory conditions, 297; rheumatism, 1; rickets, 100; septic conditions, 125; skin conditions, 299; tongue-tie, 10.

## SPECIAL TREATMENT CENTRES.—

*Teeth—Corporation Dental Clinic.*

## Number of attendances:—

Mothers, expectant, - - - -	(78)	152
Mothers, nursing, - - - -	(198)	293
Children, - - - - -	(104)	161

## Work carried out:—

## Mothers:—

Carious teeth extracted (local anaesthetic), - - - -	(227)	326
Gums treated, - - - - -	(40)	112
Advice given, - - - - -	(6)	7

## Children:—

Carious teeth extracted (no anaesthetic) - - - -	(99)	155
Gums treated, - - - - -		5
Advice given, - - - - -		1

## Number of dentures supplied:—

Upper and lower dentures, - -	5
Upper dentures, - - - -	15
Lower dentures, - - - -	2

*Eyes—Greenock Eye Infirmary.*

## Number of attendances:—

Children, - - - - -	(1,255)	1,677
---------------------	---------	-------

## Summary of conditions present:—

Cataract, 2; conjunctival conditions, 90; corneal conditions, 25; eyelid conditions, 35; injury, 23; lachrymal conditions, 1; ophthalmia neonatorum, 13; ophthalmia, other, 5; refraction errors, 23.

Note:—The figures in italics are the average figures for the last five years.

*Ear, Nose and Throat Dispensary.*

Number of attendances, - - - - - (1,166) 819

## Summary of conditions found:—

Diphtheria, 1; diseases of ear, 6; diseases of lymphatic glands, 3; diseases of nose, 10; enlarged tonsils and adenoids, 52; foreign body, 2; injury to nose, 4; mastoid, 2; throat conditions, 1.

## Operations performed:—

Mastoidectomy, 3; paracentesis, 1; tonsillectomy and adenectomy, 53.

*Other Ailments—Greenock Royal Infirmary.*

## Children:—

Number of attendances, - - - (1,921) 1,368

Number who received in patient treatment, - - - (131) 189

## Summary of conditions found:—

Bone and joint conditions, 7; burns and scalds, 55; cardiac conditions, 1; digestive conditions, 33; ear nose and throat conditions, 15; genito-urinary conditions, 93; glandular conditions, 1; injuries and fractures, 222; nervous conditions, 12; no abnormality, 13; respiratory conditions, 39; septic conditions, 54; skin conditions, 6; tuberculous conditions, 7.

## Mothers:—

Number of attendances, - - - 53

Number who received in-patient treatment, 5

## Summary of conditions found:—

Ante-natal conditions, 14; bone and joint conditions, 2; gynaecological conditions, 2; neuritis, 1; respiratory conditions, 5; septic conditions 5; skin conditions, 1; varicose veins, 1

*Ultra-Violet Light Clinic:—*

Number of cases under one year of age, (20) 15

Number of cases over one year of age, (156) 173

Number of attendances, - - - (2,759) 3,119

Number of mothers attending, - - - —

Number of attendances, - - - —

## Conditions treated:—

Debility, 106; rickets, 71; glandular conditions, 6; others, 5.

Note:—The figures in italics are the average figures for the last five years.

## FOOD AND MILK :—

	Mothers.	Children.
1.—No. of persons supplied with liquid milk, dried milk, milk substitutes and other food preparations, - - - - -	634	1,041
2.—Liquid milk— Total quantity supplied (galls.) Grade— Certified, - - - - -	6,423	19,269
3.—Dried milk and other milk substitutes— Total quantity supplied (lbs.)— Cow and Gate, - - - - - Ostermilk, - - - - -	Nil. Nil.	1,085 1,654
4.—Other food preparations— Virol, Virolax, Vitmar (lbs.), - - - Cod Liver Oil and Malt (lbs.), - - - Angiers and Aberdeen Emulsion (lbs.), Butter (lbs ), - - - - - Eggs, - - - - -	Nil. Nil. Nil. 329 2,688	245 379 106 Nil. Nil.
5.—Total cost to Local Authority— Liquid Milk, - - - - - Dried Milk and Other Milk Substitutes, Other Food Preparations, - - - - -	£2,568 16 3 213 4 6 82 12 6	
Total, - - - - -	£2,864 13 3	
Amount recovered by Local Authority, -	142 15 11	
Net Cost, - - - - -	£2,721 17 4	

## BABY OUTFITS :—

Number of Baby Outfits supplied at reduced cost in necessitous cases, - - - - -	697
Approximate net cost to Corporation, - - - - -	£139 8 0

## MEASLES :—

Number of cases notified (notification voluntary by householder, - - - - -	419
Number of deaths, { from measles, - - - - -	4
{ from sequelae, included above, - - - - -	3
Number of cases removed to hospital, - - - - -	3
Number of special domiciliary visits, - - - - -	543
Number of special staff engaged, - - - - -	1

## WHOOING COUGH :—

Number of cases notified (notification voluntary by householder, - - - - -	42
Number of deaths, { from whooping cough, - - - - -	1
{ from sequelae, included above, - - - - -	1
Number of cases removed to hospital, - - - - -	—
Number of special domiciliary visits, - - - - -	—
Number of special staff engaged, - - - - -	—

During the year a special clinic for the vaccine treatment of cases of whooping cough was held once weekly at Terrace Road Clinic. The treatment consisted of one injection weekly on three consecutive weeks, and the results were found to be satisfactory. Twenty-two cases received treatment as follows:—

1 injection,	-	-	-	-	22
2 injections,	-	-	-	-	20
3 injections,	-	-	-	-	16

#### OPHTHALMIA NEONATORUM:—

Number of cases notified	{	by medical practitioners,	—	} 28
		by midwives,	- - 27	
		by institution,	- - 1	
Number of cases proved to be gonococcal,	-	-	-	—
Number of cases treated in the Eye Infirmary (out-patients),	-	-	-	8
Number of cases removed to hospital,	-	-	-	—
Number of cases in which there was an appreciable loss of vision,	-	-	-	—

#### PROVISION OF MIDWIFERY SERVICES IN NECESSITOUS CASES:—

Cases under investigation at 1st January, 1936,	-	128
Number of applications received,	- - -	682
Number of applications granted,	- - -	351
Number of applications not granted,	- - -	328
Maternity benefit,	- - - - -	299
Income over scale,	- - - - -	5
Late application,	- - - - -	—
Other reasons,	- - - - -	24
Number of applications dealt with by Committee (included above),	- - - - -	41
Number of applications under consideration at 31st December, 1936,	- - - - -	131
Number of fees paid for attendance at abortions,	-	37
Total expenditure,	- - - - -	£461 17 6

#### GREENOCK CORPORATION MATERNITY HOSPITAL.

	Mothers.	Children.
Number in hospital at 1st January, 1936,	- - 6	5
Number of admissions during 1936,	- - - 206	1
Number of live births,	- - - - -	*152
Number of stillbirths,	- - - - -	30
Number of deaths,	- - - - -	5
Number of discharges,	- - - - -	204
Number in hospital at 31st December, 1936,	6	3

\*Includes two sets of twins both sets alive.

## Analysis of admissions:—

Ante-natal cases,	-	-	-	-	-	36
Abnormal and complicated confinements,						69
Other cases of confinement,	-	-	-	-	-	100
Post-natal cases,	-	-	-	-	-	1
Total admissions,	-	-	-	-	-	206

## (1) ANTE-NATAL CASES, - - - - - 36

Condition Found.						Result of Treatment.
10	Albuminuria,	-	-	-	-	5 discharged undelivered; 2 delivered, discharged well; 1 delivered, stillbirth, discharged well; 1 forceps delivery, discharged well; 1 forceps delivery, stillbirth, discharged well.
4	Antepartum Haemorrhage,	-	-	-	-	1 version, stillbirth, discharged well; 1 delivered, baby died, discharged well; 2 discharged undelivered.
2	Eclampsia,	-	-	-	-	1 treated, discharged undelivered; 1 died undelivered.
2	Toxaemia,	-	-	-	-	2 delivered, discharged well.
1	Pyelitis,	-	-	-	-	treated, discharged undelivered.
1	Jaundice,	-	-	-	-	prolonged labour, delivered, discharged well.
1	Cardiac Disease and Anaemia,	-	-	-	-	delivered, stillbirth, discharged well.
1	Ruptured Uterus,	-	-	-	-	died undelivered.
11	False Labour,	-	-	-	-	treated and discharged well.
3	Observation,	-	-	-	-	2 treated, discharged undelivered; 1 delivered, twins, discharged well.

## (2) ABNORMAL AND COMPLICATED CONFINEMENTS, 69

Condition Found.						Result of Treatment.
15	Contracted Pelvis,	-	-	-	-	2 Caesarean Section, discharged well; 1 Caesarean Section, transferred to Greenock Royal Infirmary; 1 Caesarean Section, phthisis, transferred to Gateside Hospital; 4 delivered, discharged well; 2 forceps delivery, discharged well; 1 version, discharged well; 1 transverse, version, stillbirth, discharged well; 1 version, stillbirth, discharged well; 1 version, craniotomy, discharged well, 1 breech, stillbirth, discharged well.
9	Prolonged Labour,	-	-	-	-	3 forceps delivery, discharged well; 2 delivered, discharged well; 2 forceps delivery, stillbirths, discharged well; 2 delivered stillbirths, discharged well.
12	Antepartum Haemorrhage,	-	-	-	-	1 placenta praevia, delivered, discharged well; 1 placenta praevia, breech, stillbirth, discharged well; 1 placenta praevia, version, discharged well; 1 placenta praevia, stillbirth, discharged well; 3 toxæmia, 2 breech stillbirths, discharged well, and 1 delivered stillbirth, discharged well; 1 prolonged labour, discharged well; 1 delivered, baby died, discharged well; 1 delivered stillbirth, discharged well; 1 forceps delivery, stillbirth, discharged well; 1 hydramnios, delivered, stillbirth, discharged well.



Condition Found.	Result of Treatment.
7 Breech Presentation, - - -	4 delivered, discharged well; 2 delivered stillbirths, discharged well; 1 delivered hydrocephalic stillbirth, discharged well.
4 Eclampsia, - - -	2 delivered, stillbirth, discharged well; 1 forceps delivery, discharged well; 1 forceps delivery, stillbirth, transferred to Greenock Royal Infirmary.
2 Hydramnios, - - -	1 version, anencephalic stillbirth, discharged well; 1 version adherent placenta, baby died, discharged well.
2 Prolapse Cord, - - -	1 version, stillbirth, discharged well; 1 delivered, discharged well.
2 Transverse Presentation, -	1 version, stillbirth, discharged well; 1 version, discharged well.
3 Foot Presentation, - - -	1 delivered, discharged well; 1 forceps delivery, discharged well; 1 delivered, baby died, discharged well.
1 Face Presentation, - - -	delivered, transferred to Gateside Hospital.
3 Delayed Second Stage, - -	1 forceps delivery, discharged well; 2 delivered, stillbirths, discharged well.
1 Placenta Praevia, - - -	Caesarean Section, discharged well.
3 Retained Placenta, - - -	3 delivered, discharged well.
1 Adherent Placenta, - - -	delivered, discharged well.
1 Twins, - - -	1 forceps delivery, 1 manual delivery, discharged well.
1 Ascites, - - -	delivered, discharged improved.
1 Disseminated Sclerosis, - -	forceps delivery, discharged well.
1 Epileptic, - - -	delivered, discharged well.
(3) OTHER CASES OF CONFINEMENT, - - -	100
(4) ABORTIONS, - - -	Nil.
(5) POST-NATAL CASES, - - -	1

Condition Found.	Result of Treatment.
1 Normal delivery, transferred from Hotel, - - -	treated, discharged well.
Other information:—	
(a) Number of normal deliveries, - - -	100
(b) Number of cases delivered without medical attendance at delivery, - - -	144
(c) Number of instrumental deliveries, exclusive of those appearing under (2), - - -	Nil.
(d) Number of cases of puerperal fever removed from institution, - - -	Nil.
(e) Number of cases of puerperal pyrexia, - -	4
(f) Number of cases under (c) in which delivery was instrumental, - - -	3
(g) Number of deaths, - - -	2
Eclampsia, undelivered, - - -	1
Ruptured uterus, undelivered, - -	1

- (h) Number of infants born,  $\left\{ \begin{array}{l} \text{alive,} \\ \text{stillborn,} \end{array} \right. \begin{array}{lll} - & - & - \\ - & - & - \end{array} \begin{array}{l} 152 \\ 30 \end{array}$   
 Number of sets of twins,  $\begin{array}{lll} - & - & - \\ - & - & - \end{array} \begin{array}{l} 2 \\ \end{array}$   
 (i) Number of deaths of infants under 8 days old,  $\begin{array}{l} - \\ - \end{array} \begin{array}{l} 5 \\ \text{Nil.} \end{array}$   
 Number of deaths of infants over 8 days old,  $\begin{array}{l} - \\ \end{array}$   
 (j) Streptococcus antitoxin was given after delivery in 30 cases of abnormal or difficult confinement with the following result:—

Puerperium normal,  $\begin{array}{lll} - & - & - \\ - & - & - \end{array} \begin{array}{l} 27 \\ 3 \end{array}$   
 Rise of temperature,  $\begin{array}{lll} - & - & - \\ - & - & - \end{array}$

1 Eclampsia, transferred to  
Greenock Royal Infirmary.

1 Foot Presentation.

1 Ante-partum haemorrhage,  
transferred to Gateside  
Hospital.

### HOSPITALS FOR SICK CHILDREN:—

Children's Hospital, Shaw Place:—

Number in hospital as at 1st January, 1936,  $\begin{array}{lll} - & - & - \end{array} \begin{array}{l} 28 \\ \end{array}$   
 Number admitted during the year,  $\begin{array}{lll} - & - & - \end{array} \begin{array}{l} 109 \\ \end{array}$   
 Number discharged,  $\begin{array}{lll} - & - & - \end{array} \begin{array}{l} 88 \\ \end{array}$   
 Number died,  $\begin{array}{lll} - & - & - \end{array} \begin{array}{l} 33 \\ \end{array}$   
 Number remaining in hospital at 31st December, 1936,  $\begin{array}{lll} - & - & - \end{array} \begin{array}{l} 16 \\ \end{array}$   
 Average period of residence,  $\begin{array}{lll} - & - & - \end{array} \begin{array}{l} 67.64 \text{ days.} \\ \end{array}$

The following were the conditions present and the results of treatment during 1936:—

CONDITION.	Cases in hospital 1st January, 1936	Cases admitted	Well.	Improved.	Not Improved.	Died.	Removed to Gateside Hosp.	Removed to Royal Infirmary.	Rem'd to Royal Hospital for Sick Child'n. Glasgow.	Cases remaining in Hospital 31st Dec., 1936.
Anaemia and Debility,	4	21	15	6		3	...	...	...	1
Gastro-enteritis, ...	7	28	12	6	1	12	...	...	...	4
Pneumonia, ...	3	12	5	3	...	6	...	...	...	1
Rickets, ...	1	2		1	...	...	...	...	...	2
Skin conditions, ...	4	5	6	1	...	...	...	...	...	2
Marasmus, ...	5	12	2	1	2	8	...	...	...	4
Bronchitis, ...	4	12	10	3	...	1	1	...	...	1
Convulsions, ...	...	1		...	...	1	...	...	...	...
Septic conditions, ...	...	7	2	3	...	1	...	...	...	1
Other Conditions, ...	...	9	2	2	...	1	...	2	2	...
TOTAL, ...	28	109	54	26	3	33	1	2	2	16

Only two cases of infectious disease occurred during the year, one case of mumps in a member of the staff, and one case of measles in a patient. Both were removed to hospital.

#### CONVALESCENT HOMES :—

Debilitated mothers, before and after confinement, are admitted to the Mission Coast Homes, Saltcoats, along with their babies.

Number of admissions, - - - 27

Average period of residence, 11.3 days

#### MIDWIVES (SCOTLAND) ACT, 1915.

During 1936, certified midwives attended 71 per cent. of the total births in the burgh as against 74 per cent. last year and 75 per cent. in 1934. This figure is still tending downwards.

Medical assistance was called in by midwives in approximately 39 per cent. of their cases. This figure is still on the down grade but is higher than in past years.

#### BIRTHS :—

Total number of births (notified),	- - - - -	1,684
Total number of deaths of new-born children,	- - - - -	46
Number of births attended by midwives,	- - - - -	1,202
Number of deaths of new-born children occurring in the practice of midwives,	- - - - -	29
Number of cases not attended by doctor or midwife,	- - - - -	—

#### CASES OF OPHTHALMIA NEONATORUM :—

Total number of cases,	- - - - -	28
Number of cases occurring in the practice of midwives,	- - - - -	27
Number of cases not attended by doctor or midwife,	- - - - -	—

#### CASES OF PUERPERAL SEPSIS :—

Total number of cases,	- - - - -	3
Total number of deaths,	- - - - -	1
Number of cases occurring in the practice of midwives,	- - - - -	3
Number of deaths occurring in the practice of midwives,	- - - - -	—
Number of cases not attended by doctor or midwife,	- - - - -	—

#### CASES OF PUERPERAL PYREXIA :—

Total number of cases,	- - - - -	19
Total number of deaths,	- - - - -	3
Number of cases occurring in the practice of midwives,	- - - - -	7
Number of deaths occurring in the practice of midwives,	- - - - -	—
Number of cases not attended by doctor or midwife,	- - - - -	—

#### CASES OF STILLBIRTH (DEAD BORN CHILDREN) :—

Total number of cases during 1936,	- - - - -	78
Actual number of cases occurring in the practice of midwives during 1936,	- - - - -	35

## CASES OF EMERGENCY :—

There were 477 cases of emergency, namely :—

*Ante-natal.*—

Ante-partum haemorrhage, 25; Eclampsia, 4; Illness of mother, 19; Oedema 4; threatened and complete abortion, 46.

*Intra-natal.*

Abnormal presentation, 40; adherent placenta, 9; contracted pelvis, 12; delayed labour, 86; maternal distress, 3; prolapse of cord, 4; torn perineum, 109; uterine inertia, 4.

*Post-natal.*

Illness of mother, 19; pyrexia, 23; post-partum haemorrhage, 8.

*Child.*

Abnormality, 6; illness of child, 13; prematurity, 27; stillborn, 16.

## NOTIFICATION :—

The following notifications required under the rules of the Central Midwives Board and the Public Health (Ophthalmia Neonatorum) Regulations (Scotland), 1918, were received :—

Notification of stillbirth, - - - - -	32
Notification of having advised artificial feeding, - - - - -	14
Notification of death, - - - - -	15
Notification of having laid out a dead body, - - - - -	12
Notification of liability to be a source of infection, - - - - -	1
Notification of ophthalmia neonatorum, - - - - -	28
Notification of patient's failure to follow advice, - - - - -	61

## SUPERVISION :—

Forty-nine midwives notified their intention to practice within the burgh, but only 30 were actually in practice. Of the latter 3 resided in the burgh of Port-Glasgow.

Ninety-four supervisory visits were made by the Assistant Inspectors of Midwives during the year. The work of the midwives was satisfactory.

All the 61 expectant mothers referred to as having failed to follow advice given by their midwife were visited by the health visitors, with the following results :—

Stated that own doctor was in attendance, - - - - -	2
Promised to call in own doctor, - - - - -	35
Confinement found to be over or due, - - - - -	9
Refused to attend ante-natal clinic or to seek medical advice, - - - - -	6
Persuaded to attend ante-natal clinic, - - - - -	9

There has been a considerable drop in the figure of patients who refused or failed to follow the midwife's advice, and it is probable that this is due in part at least to the education campaign being carried on in the burgh.

## VENEREAL DISEASES.

The Corporation during the year agreed to the admission of such cases of general paralysis of the insane as required malaria treatment to Glasgow Corporation Hospitals if and when

accommodation was available for that purpose. This should prove a useful addition to the armamentarium of treatment of venereal disease.

Hospital treatment of acute venereal conditions was provided, as formerly, at Craw Road Hospital, Paisley, where the use of four beds is available to the burgh. This provision, otherwise entirely satisfactory, has the great disadvantage of being located at a considerable distance, but it is hoped that accommodation will be created locally when the proposed new municipal hospital is built.

#### MALES.—

The out-patient clinic at the Royal Infirmary continued to give good service, and no material change was made in the routine of treatment.

During the year 1936, 177 new cases reported for examination at the clinic. Of these, 123 were from Greenock, 16 from Port-Glasgow, and 13 from Gourock, while 4 were from the landward portion of Renfrewshire, and 1 from a district out-with the county. The remainder, 20 in number, were shipping cases.

The following Table gives comparative figures for the years during which the clinic has been in operation:—

Year ending 31st December.	New Cases.	Attendances at Clinics.	Attendances at Centre.	Total Attendances.
1923	182	1,592	5,970	7,562
1924	160	2,054	6,436	8,490
1925	178	2,363	7,707	10,070
1926	176	2,923	10,118	13,041
1927	189	2,845	11,245	14,090
1928	194	3,083	11,468	14,551
1929	182	3,373	7,188	10,561
1930	179	3,043	7,351	10,394
1931	147	2,723	6,039	8,762
1932	130	3,035	6,590	9,625
1933	100	2,883	5,272	8,155
1934	109	3,376	7,030	10,406
1935	132	3,120	7,462	10,582
1936	177	3,333	9,145	12,478



Last year there was a small increase in the number of new cases: this year there is an increase which is more marked, and which brings the figure for 1936 above the average of the past five years. It was noted last year that in a centre like Greenock the figures are liable to show some oscillation every year, but hope was expressed that the tendency was towards a decrease in the incidence of the venereal diseases. Now it is obvious that the 1936 figure is approximately the same as the 1930 figure, that the incidence dropped from the earlier year to a low level in 1933-34, and mounted during 1935 to its present level. This bears a striking relationship to what might be termed the curve of industrial activity in Greenock from the depression of 1930 to the more recent increase in employment. It is a well recognised but disconcerting fact that the incidence of venereal disease bears a relationship which is in direct proportion to the material prosperity of a community. It is not, of course, the only factor, but, *ceteris paribus*, the relationship is direct.

Syphilis shows a decline as compared with last year, the figures being 35 as against 42, but this figure is still above the last four yearly average, namely, 31.5. Of these 35 new cases of syphilis diagnosed during the year, 16 were in the primary stage, 11 in the secondary stage, and 7 in the later stages of the disease. In the remaining single case the infection was of congenital origin (the disease manifesting itself as bilateral interstitial keratitis): this patient reported at the age of 17 years. The cases reporting in the early stages of the disease numbered 27, or 77.1 per cent. of the total, as compared with 85.4 per cent. last year, and 55.6 per cent. in 1934. The preponderance of early cases is gratifying to the extent that such cases, given adequate treatment, can be definitely cured. This is true preventive medicine in that the late crippling manifestations of the disease can be prevented.

Gonorrhoea accounted for the greater part of the increase in this year's figures. Last year there were 68 new cases: this year the number has risen to 104. From January to September the incidence of gonorrhoea varied from 6 to 10 new cases per month, with an average of 7.4: in the last three months of the year the incidence increased sharply, the figures for October, November and December being respectively 10, 13, and 14.

The different types of case dealt with throughout the year were as follows:—

Type of Case.	On register 1st Jan., 1936.	New Cases.	Returned for further treatment.	Ceased to attend.	Transferred to other centres.	Di- charged Cured.	Died	Remaining 31st Decem- ber, 1936.
Syphilis, ... ..	79	35	7	28	8	4	3	78
Gonorrhoea, .. ..	34	104	...	28	19	39	...	52
Soft chancre, ... ..	...	2	...	...	...	2	...	...
Non-specific venereal infections,	...	8	...	...	...	8	...	...
Conditions other than venereal,	...	28	...	...	...	28	...	...

This gives a defaulter rate of 23.14 per cent. in the case of syphilis, and in the case of gonorrhoea 20.28 per cent. The defaulter rate in gonorrhoea has remained more or less constant for some years now, but the defaulter rate in syphilis has increased from last year's figure of 12.5 per cent. Of those who defaulted during treatment for syphilis, 14 had not even completed one course of treatment. The other 14 had varying amounts of treatment, but had not completed tests of cure. The corresponding figures for gonorrhoea defaulters are 16 and 12. That means that there are going about the streets at least 30 individuals who are a potential source of danger to the community, in that they suffer from an infectious disease, and who are a menace to their own future health and well-being and also to that of their families. Yet we have no power to deal with such cases. Much can be done, and is done, to stimulate and encourage attendance, but there is always a certain minority who cannot see beyond the needs of the moment, and who jeopardise the future for the comfort of the present.

During the year five patients who required in-patient treatment were admitted to Craw Road Hospital, Paisley. Of these, three were suffering from gonorrhoea (one acute gonorrhoea, two acute multiple gonococcal arthritis), one from syphilis (arsenical dermatitis developed during anti-syphilitic treatment), and one from soft sore. The average duration of stay in hospital was 57 days.

There were examined in the Public Health Laboratory, Glasgow, 178 specimens of blood, taken for the Wassermann reaction. The remainder of the bacteriological work was done in the clinic and entailed the examination of 44 scrapings for spirochaetes, and 1,313 smears for gonococci.

## FEMALES.—

No changes of note have been carried out in the premises or routine of treatment during the year.

The remarks made with regard to the incidence of venereal disease in males is not borne out by the figures for females, but in this regard there are certain factors which tend to obscure the issue, particularly the small number of female cases, and the insidious nature of the disease in women.

The following table gives the comparative figures for the years during which the clinic has been in operation:—

Period under Review.	New Cases	Attendances at Clinics.	Attendances at Centre.	Total Attendances.
24th November to 31st December, 1929.	12	107	7	114
1930.	100	1,209	127	1,336
1931.	123	2,061	458	2,519
1932.	93	2,064	652	2,716
1933.	101	2,127	1,077	3,204
1934.	79	1,884	1,075	2,959
1935.	112	1,697	1,163	2,860
1936.	86	1,830	1,184	3,014

One hundred and seven specimens of blood were examined by the Wassermann test at the Public Health Laboratory, Glasgow, and 454 smears for gonococci were dealt with at the centre.

The following table gives information regarding the type of cases:—

TYPE OF CASE.	On Register 1st Jan., 1936.	New Cases	Returned for further treatment.	Ceased to attend.	Transferred to Other Centres.	Discharged.	Died.	Remaining 31st Dec., 1936.
Syphilis, - -	47	12	4	24	1	3	—	35
Gonorrhoea, -	34	28	5	23	3	5	—	31
Soft Chancre	—	—	—	—	—	—	—	—
Non-specific venereal infections,	—	—	—	—	—	—	—	—
Conditions other than venereal,	13	46	—	—	—	25	—	34

This gives a defaulter rate of 38.09 per cent. in the case of syphilis, and 41.79 per cent. in the case of gonorrhoea. Last year's figures were 22 per cent. and 38 per cent. respectively, while in 1934 they were 9 per cent. and 31 per cent. These figures would appear to indicate that attendance at the clinic is becoming less satisfactory, but it is doubtful if this is really so, as the smallness of the figures is liable to produce apparent violent fluctuation from year to year.

Of the 12 cases of syphilis which came under treatment for the first time during 1936, 3 were in the primary stage, 2 were in the secondary stage, and 7 in the later stages of the disease. No cases of congenital syphilis reported for treatment.

Six patients were removed to Craw Road Hospital, Paisley, one on account of syphilis, and 5 on account of gonorrhoea. The average duration of stay in hospital was 38 days.

## HOSPITAL ACCOMMODATION AND AMBULANCE ARRANGEMENTS.

### GREENOCK AND DISTRICT COMBINATION HOSPITAL, GATESIDE:—

The hospital continued to give excellent service during the year, and no difficulty was experienced in obtaining the admission of patients.

The building of a nurses' home for 36 nurses was commenced in 1936, and considerable progress had been made by the end of the year.

The following information regarding the treatment of cases and the results obtained is included by the courtesy of the Medical Superintendent:—

## I.—CASES TREATED CLASSIFIED ACCORDING TO DISEASE.

DISEASE.	Cases in Hospital 1st January, 1936.	Admitted during 1936.	Discharged during 1936.	Died during 1936.	Cases remaining in Hospital 31st December, 1936.	Fatality Rate.
Diphtheria, .. ..	36	195	211	4	16	1.73
Erysipelas, .. ..	1	14	13	1	2	1.76
Scarlet Fever, .. ..	10	103	95	2	16	12.56
Puerperal Fever, ..	..	8	7	1	..	6.66
Measles, .. ..	..	15	14	1	..	8.52
Tuberculosis, .. ..	8	60	45	6	17	26.66
Chickenpox, .. ..	4	3	7	..	2	15.38
Pneumonia, .. ..	3	12	9	4	..	18.18
Enteric Fever, .. ..	1	12	11	2	..	..
Other Diseases, .. ..	..	22	18	4	..	..
Total, .. ..	63	444	430	24	53	4.73

II.—CASES CLASSIFIED ACCORDING TO DISTRICTS FROM WHICH  
ADMITTED.

DISTRICT.	Cases in Hospital 1st January, 1936.	Admitted during 1936.	Discharged during 1936.	Died in Hospital.	Cases remaining in Hospital 31st December, 1936.
Greenock, .. ..	31	287	262	15	41
Gourock, .. ..	10	48	55	1	2
Port-Glasgow, .. ..	20	102	104	8	10
County, .. ..	2	7	9	..	..
Total, .. ..	63	444	430	24	53

III.—AVERAGE PERIOD OF RESIDENCE OF PATIENTS DISCHARGED  
DURING 1936.

DISEASE.	Discharged during 1936.	Aggregate Number of Days' Residence.	Average Days' Residence.
Scarlet Fever, .. ..	195	3,739	39
Diphtheria, .. ..	211	7,024	33



IV.—CASES ADMITTED FROM THE BURGH OF GREENOCK  
CLASSIFIED ACCORDING TO DISEASE.

DISEASE.	Cases in Hospital 1st January, 1936.	Admitted 1936.	Discharged 1936.	Died 1936.	Cases remaining 31st December, 1936.	Fatality Rate.
Scarlet Fever, ...	5	74	67	1	11	1.26
Diphtheria, ...	11	104	103	...	12	...
Tuberculosis, ...	8	60	45	6	17	8.82
Measles, ...	...	10	9	1	...	10.00
Enteric Fever, ...	1	3	4	...	...	...
Erysipelas, ...	...	6	6	...	...	...
Chickenpox, ...	4	1	5	...	...	...
Interperal Fever, ...	...	8	7	1	...	12.50
Pneumonia, ...	2	7	4	4	1	44.44
Mumps, ...	...	3	3	...	...	...
Other Diseases ..	...	11	9	2	...	18.18
Total.	31	287	262	15	41	4.71

WEST RENFREWSHIRE COMBINATION SMALLPOX HOSPITAL.

No cases of smallpox occurred during the year, and the arrangements in connection with this hospital remained unchanged.

SMITHSTON HOSPITAL.

Information regarding the hospital section of Smithston Institution will be found under "Medical Care and Nursing of the Sick Poor."

AMBULANCE ARRANGEMENTS.—

There has been no change in these services during the year. They remain efficient and satisfactory.

MEDICAL CARE AND NURSING OF THE SICK POOR.

(I). NURSING SERVICE.

The home nursing of the sick poor was, as formerly, carried out by the nurses of the Greenock and District Nursing Association under the direction of the District Medical Officers. This service is very satisfactory, and is able to deal with all cases requiring attention. An annual grant is paid to the Association by the Corporation in virtue of this work.



## (II). MEDICAL SERVICE.

*General.*

Dr. J. Nelson Russell, one of the two doctors who had been carrying out the general poor law domiciliary medical work in the burgh, resigned during the year, and considerable difficulty was experienced in finding a successor. Dr. McCawley, however, kindly performed the duties alone for a considerable period.

The possibilities of a panel system, with free choice of doctor, were investigated, and negotiations were entered into with the Medical Faculty, but it was not found possible to formulate a scheme which would undoubtedly have been a great improvement in the medical arrangements for dealing with the sick poor requiring attention in their own homes.

Early in 1937 Dr. C. W. Marshall was appointed to carry out the work for wards VII. and VIII., and temporarily for parts of wards I. and II., while later on Dr. Gwendoline R. Andrews was appointed to wards I. and II.

To facilitate the work in the east-end of the burgh, arrangements were made at the Reception House, Sinclair Street, for two rooms to be set apart as a consulting room and a waiting room; these appear to have been very usefully employed.

The following number of persons received outdoor medical relief during the year:—

Males,	-	-	-	2,557
Females,	-	-	-	2,964
Children,	-	-	-	2,704
				<hr/>
Total,	-	-	-	8,225
				<hr/>

*Mental.*—

The clinic for nervous disorders was carried on during the year. Fifteen persons attended, and of these, two were admitted to Smithston Hospital for observation, two others were advised to enter hospital, but refused, while one case was recommended for certification as insane.

This clinic serves a very useful purpose, but it is now obvious that its work is very greatly handicapped by the lack of suitable in-patient observation accommodation, as Smithston Hospital at present cannot be so considered. Satisfactory provision for this purpose will, it is hoped, be made when the new municipal hospital is built.

### III.—INSTITUTIONAL MEDICAL ARRANGEMENTS:—

#### *Hospital.—*

Conditions at Smithston Hospital remained materially unchanged during the year. Owing to the shortage of suitable labour in the institution, two ward maids were appointed for duty in the male hospital, to be under the jurisdiction of the Superintendent of Nurses.

A new internal telephone system to allow of satisfactory inter-communication between different parts of the institution was agreed to, but had not been installed before the end of the year.

#### *Proposed Municipal Hospital.—*

Following on an undertaking previously given to the Department of Health, the Corporation considered the advisability of creating new and more extensive hospital accommodation, primarily to replace that at Smithston Institution, and resolved to build a new municipal hospital outwith the poor law containing:—

General Beds,	-	-	-	96
Tuberculosis Beds,	-	-	-	30
Mental Observation Beds,	-	-	-	10
Venereal Diseases Beds,	-	-	-	4
				<hr/>
Total Beds,	-	-	-	140
				<hr/>

These figures are tentative, and it is probable that the mental observation beds may be reduced to 6 and the general beds increased to 100.

Powers already exist for the provision of accommodation for the treatment of tuberculosis and venereal diseases, but, before the other classes of patients can be dealt with, a scheme under section 27 of the Local Government Act, 1929, will require to be framed and approved by the Department of Health.

The Commissioner for Special Areas, who was approached, indicated that he would be ready to provide a grant equal to 40 per cent. of the approved cost if the hospital were for the needs of Greenock alone, or 50 per cent. if the needs of neighbouring special areas were also met. Negotiations with Port-Glasgow and the County of Renfrew were proceeding at the end of the year. If these are successful the number of beds shown above will require to be increased according to the needs of these authorities.

Mr James Lochhead, F.R.I.B.A., Hamilton, was appointed architect, and the plans are now well under way. The site provisionally selected is magnificently placed on the east side of the Larkfield Road, overlooking both the firth of Clyde and the Kip Valley. This hospital should finally remove the stigma of poor law relief from the question of hospital treatment, which was one of the objects of the Local Government Act.

#### DR. LEGGETT'S ANNUAL REPORT ON SMITHSTON POORHOUSE.

I beg to submit the following report, arranged as far as possible on the lines indicated in Public Assistance Circular No. 29, Appendix B., issued by the Department of Health for Scotland on the 7th January, 1933.

The question of the suitability of this Institution as a whole for the accommodation and treatment of sick persons has been reviewed and commented upon, on many occasions, by representatives of the Health Department and of the Local Authority, both of whom are conversant with the position as it exists at present. The matter was discussed in some detail in the Medical Report 1933, since which date no alteration of any consequence has occurred in the structural arrangement and facilities for treating the sick. Since, however, the provision of increased and more up to date accommodation is under consideration at present, and is in fact actually under construction in the case of maternity patients and sick children, it is unnecessary to make further comment here, except to state that the same difficulties still exist regarding the classification of the various types of sick persons at Smithston.

A considerable amount of repairs are still urgently needed in the wards and corridors, and an effort should be made as soon as possible to rectify this matter.

The usual proportionate number of nurses was engaged in carrying out the duties necessary to the particular type of patient admitted to the institution. Some difficulty, however, is still experienced in securing an adequate number of general trained staff.

The patients are provided with sufficient food, and extra sick diet, e.g., milk, eggs, fish, bovril, etc., are always available and are supplied in all cases where advisable. The Council does not restrict the Medical Officer in the matter of providing whatever food and medicine appears to be reasonably necessary towards improving the health and well being of the patients.

The heating and lighting of the wards is sufficient, but a supply of hot water is not always available at night during the summer months. This naturally gives rise to considerable inconvenience in dealing with a person in a state of neglect on admission, or in the case of an urgent confinement.

No difficulty arises in obtaining the drugs, surgical dressings and appliances which may be required for medical and nursing treatment.

The wireless continues to be a source of interest and entertainment to the majority of the patients, but unfortunately the transmission to the wards is at times unsatisfactory.

At 31st December 1935 there were 92 sick persons in residence in the hospital wards. During the year 1936, there were admitted 166 men, 81 women, 10 boys, and 13 girls, including 6 male and 4 female infants born in the institution—that is, a total of 270 admissions, making the number under treatment 362. Of this number 132 left the hospital wards as recovered, 33 as relieved, 61 died, and 37 were removed for various reasons such as leaving or being removed by relatives against advice. Five children accompanied their mothers on the latter's discharge. Eleven patients were under observation for their mental condition, but only three were found to be certifiable as insane.

As compared with last year there were 38 more admissions. About 61 per cent. of those admitted recovered sufficiently from the disease from which they suffered on admission to justify their discharge.

Of those admitted, 50 per cent. were over 60 years of age; 11 were actually over 80, and 1 over 90 at the time of admission.

The diseases dealt with were very numerous. Many were suffering from affections of the heart and blood vessels, the respiratory system, the digestive system, and the kidneys. There were 8 cases of organic brain disease, 7 cerebral haemorrhage, 9 of cancer, 3 of gangrene, and 2 of diabetes, various forms of paralysis, rheumatism, skin troubles, including scabies, and advanced senility.

As is usual, a number were suffering from neglect, improper food, exposure, and inattention to cleanliness, constipation and ventilation of their bowels. Others were cases of ordinary acute illness, e.g., influenza. There were 14 cases of pregnancy, and 11 were for observation of their mental condition. Although



many of the cases admitted are of a so-called chronic type, in the sense that they are not suffering from the more acute, feverish illnesses, and not requiring major surgical operation, and consequently are not accepted in the Royal Infirmary, nevertheless all admissions to the hospital are accompanied by medical certificates indicating that hospital treatment is necessary, which, in fact, is so in the case of most of them. We cannot refuse to admit such people, and indeed they quite often require urgent attention, many being practically moribund on arrival. The majority require intensive cleansing on admission, and, being often helpless and faulty in habits, need constant and laborious nursing attention and changing of bed linen.

Forty-five of those who died were over 60 years of age. 17 being over 70, 6 over 80, 1 over 90, and one aged 105. There were no deaths amongst the 45 patients who were under 35 years of age at the time of admission.

The chief causes of death were those resulting from diseases of the heart and blood vessels, lungs and bronchial tubes, brain and spinal cord and kidneys, also cancer and the degenerative changes resulting from senility.

Of 14 children treated in hospital during the year, one only—an infant aged 8 days—died, as a result of acute bronchitis.

There were 10 confinements, no still-births, and no case of maternal mortality amongst those admitted to the Poorhouse Hospital.

The position as regards administration and the general facilities for the care and treatment of sick persons remains unchanged.

#### *Asylum.*—

The use of the tuberculosis pavilion at Smithston for male asylum cases materially helped to relieve the congestion during the year, but arrangements were made and plans commenced for a new male mental block of 46 beds situated in the grounds of the institution. At the end of the year, however, these plans had not been completed.

The female side of the asylum has not so far received any relief from the prevailing overcrowding, but, when the new male block is completed, it will be possible, by utilising the pavilion for females, to achieve considerable improvement in this respect.



A scheme for dental treatment was instituted during the year and details of the work are given later. The old operating theatre on the hospital corridor was put into commission and fully equipped as a dental surgery, and has served its new purpose satisfactorily.

#### DR LEGGETT'S ANNUAL REPORT ON GREENOCK PAROCHIAL ASYLUM.

I have the honour to submit the following report on the Greenock Parochial Asylum for the year ended 31st December, 1936.

##### GENERAL STATISTICS.—

On the 31st December, 1935, the number of patients on the register was 267, of which 154 were men and 113 women. During the year under review 20 men and 18 women were admitted so that the total number under treatment was 305, that is, 5 less than last year.

The number of patients discharged was 19; of these 16 left the institution as recovered, 2 were transferred to other asylums, and one was discharged as "not insane" owing to lapse of emergency certificate.

The number of deaths was 22.

The names of 264 patients remained on the register on the 31st December, 1936, of which 150 were men and 114 women, being a decrease of 4 men and an increase of 1 woman as compared with the corresponding date last year.

The average daily number resident was 264.

One private patient and one boarder were accommodated in the asylum for short periods during the year, the boarder being chargeable to the burgh of Port-Glasgow. The private patient was subsequently transferred to Morningside Asylum, Edinburgh.

Six service patients were in residence at the end of the year, no change having taken place as regards numbers or individuals. Five of these belong to the Burgh of Greenock, and one to the County of Argyll. The cost of maintenance and of certain extras continues to be defrayed by the Ministry of Pensions, and this arrangement also applies to the case of an ex-Serviceman not in the service patient's category.

### ADMISSIONS.—

The number of admissions was 38, consisting of 20 men and 18 women—the lowest male admission rate for ten years—being a decrease of 14 men and an increase of 5 women as compared with last year. Thirty-one were admitted for the first time, and 5 were re-admissions. Of the latter, three had two previous attacks, and two had three previous attacks. Two patients were admitted as transfers from other asylums. One male and one female were discharged and re-admitted during the year.

The following are the forms of mental disorder from which those who were admitted suffered:—Systematised delusional insanity, 7; melancholia, 5; organic dementia, 5; mania, 4; dementia praecox, 4; senile dementia, 3; congenital mental deficiency, 3; alcoholic insanity, 2; general paralysis of insane, 2; non-systematised delusional insanity, 1; psychosis of lethargic encephalitis, 1; and not insane, 1.

### AETIOLOGY.—

The mental symptoms resulting from the diseased condition of the brain, and collectively known as insanity, are still looked upon by a large proportion of the community as a mysterious affliction, difficult to explain, and usually incurable; in consequence, it may not be out of place here to draw attention to a few of its aspects which should be of interest.

The term “insanity” is prone to be used in a somewhat loose and misleading sense, and gives rise to a feeling of alarm and resentment in the minds of those who are legally certified as such and of their relatives; also the term “asylum,” which in these days really means a hospital for the treatment of mental disease, has become objectionable in its significance on account of the unpleasant conditions which existed—now, fortunately, many years ago—in such institutions.

It may appear unfortunate that every individual who is detained in an “asylum” is considered insane, even when his nervous or mental disturbance is of a transitory and easily curable nature. The fact of having been certified as insane and detained compulsorily in an asylum, even for a short period, is an unpleasant incident in the existence of any individual, and if such incident is not absolutely necessary, then every legal means available should be taken advantage of, to obviate it. Especially is this so, since the majority of certified cases

are detained only for a short period. For instance, one-third of those discharged recovered during this year left this institution within three months, and last year more than half left as recovered within four months. This difficulty can be overcome by the institution of observation wards, and by taking advantage of the provisions of the Mental Treatment Act, 1930, and many local authorities have made arrangements accordingly, i.e., to admit suitable cases as voluntary or temporary patients. An increasing number of uncertified cases are being admitted to mental hospitals as a result of this Act.

Certain forms of mental disease, e.g., dementia praecox, must be looked upon as being of a chronic type, chiefly owing to hereditary influences, otherwise a definite aetiological factor is difficult to identify in such cases, unless it be dysfunction of the endocrine system, described as being the most important element in determining personality. There are other forms, however, which are predisposed to, and later excited by, definite local diseased conditions of a curable nature, the toxins and even organisms from which show their effects on the various organs of the body, notably the brain and certain endocrine glands whose close connection with the nervous system and influence on the emotional balance of the individual are definitely recognised. In this connection, reference is specially made to diseased conditions of the middle ear, the throat—septic tonsils—and the accessory nasal sinuses, the last named being extremely liable to infection, and often quite early in life. These should be looked for, and dealt with as soon as recognised, as should also dental sepsis and intestinal stasis and absorption, which are perhaps the most common forms of systematic poisoning. Neglect of the last named condition may be the final determining factor in cases of puerperal sepsis with mental symptoms. Dental sepsis has been notoriously prevalent amongst chronic types of cases in asylums, and is now almost universally receiving expert attention. There appears to be a reduction in the number of cases associated with certain exogenous poisons such as alcohol and drugs, even without prohibition in the case of the former, but certainly due to the protection afforded drug addicts by the Dangerous Drugs Act in the case of the latter. Cases of general paralysis of the insane are also very noticeably reduced, due undoubtedly to the effective methods of diagnosis and treatment of syphilis adopted by the local public health authorities; the effects of this disease on the central nervous system, when allowed to develop, are devastating. Here also attention should be drawn

to the good results which accrue from an efficient ante-natal and maternity service in controlling congenital defects and birth trauma, which are responsible for many mental defectives. The social and domestic peace of the mother must above all be safeguarded if emotional instability is to be prevented in the offspring.

But there still remains the results of the lack of control of the mentally deficient as an existing class, partly on account of institutional accommodation difficulties, but chiefly due to the amount of freedom available to the higher grade defectives and feeble minded outside institutions. Many of these persons contract marriages before being judicially examined, or while on trial in community life after a period of discipline and training which, though helpful, does not eradicate the inherent weakness. This aspect of the question is difficult to regulate, and not infrequently leads to disastrous consequences. The marriage of defectives is to be deprecated, but public opinion is reluctant to approve of the continuous segregation of those members of the community merely for eugenic reasons. As long as no proper control can legally be exercised over cases of incipient insanity and mental defectives, so long will morbid inheritance continue to be a great factor in the causation of mental derangement.

#### DENTAL TREATMENT.

Mr Blake was appointed by the Corporation to carry out the dental treatment of the patients in the institution. The necessity for this appointment was unanimously recognised, and has most certainly been justified by the results obtained. Mr Blake and Mr Sinclair started this work on the 12th of July, and up to the end of the year they had examined 80 male and 82 female, and treated 28 male and 31 female mental patients, and extracted 722 teeth, all under general anaesthesia. I should mention here that the anaesthetic used is Nitrous Oxide and Oxygen, administered by the McKesson apparatus, which, in expert hands, is the safest and most expeditious method available. It will be readily understood that to extract an average of 13 teeth, as was the case in the patients referred to above, it would have been practically impossible to do so by local anaesthesia on account of the length of time involved. Mental patients would resist treatment and refuse to repeat the number of visits necessary. Also the administration of chloroform is tedious, unpleasant, and even dangerous where debilitated cases are concerned, on account of possible struggles during,



and severe nausea and vomiting after treatment. The inhalation of oxygen and nitrous oxide gas is rapid, there is no sickness afterwards, and a person can, if necessary, be resuscitated immediately by cutting out the latter and continuing with pure oxygen.

A proper index card is kept for each patient showing the treatment given. Members of the nursing staff are in attendance on all occasions, and Mr Blake has repeatedly expressed his appreciation of the competent assistance he has received from the nurses. Although many very difficult cases have been treated, no untoward incident occurred; and this is largely due to the tactful, understanding, and dexterous manner in which Mr Blake and Mr Sinclair approach and deal with the patients. All are carefully selected by the Medical Officer in order of urgency, no compulsion is exercised, and the relatives are previously consulted. Expert dental attention was badly needed in the case of all those treated, and there is no doubt that great benefit to health, comfort, and local hygiene will result. An important aspect of this form of treatment is that a considerable number of "behaviour" patients are aggravated by the existence of irritating physical conditions, e.g., decayed or painful teeth. The patients may not be aware of these conditions, or they may be acutely conscious of them, or they may not be sufficiently intelligent to draw attention to them, but certainly comparatively mild cases of emotional instability may be greatly exacerbated by such irritating influences. The amount of damage to the general health resulting from the constant and continued absorption of septic matter from decayed teeth cannot be exaggerated.

#### DISCHARGES.—

The number of patients discharged during the year was 19; of this number 16 left the institution as recovered, 1 was transferred to the Royal Edinburgh Hospital for mental disorders and 1 to Renfrew District Asylum. One patient was discharged as "not insane."

Of those discharged recovered, 9 out of a total of 16 left the institution within six months.

The recovery rate for the year, calculated on all admissions, including transfers from other asylums, is 44.7 per cent. This figure, together with similar results in previous years, should dispose of the impression apparently existing that only chronic cases are admitted to this asylum, an impression which is quite



erroneous. Greenock, like all other communities, is productive of very acute and difficult types of patients, who tax the ingenuity, resourcefulness and sense of responsibility of the nursing staff. In fact, chronic cases, as such, are not admitted here, except, of course, as transfers from other asylums, all being primarily, certified for direct admission, as is the case in other asylums.

#### DEATHS.—

Sixteen men and 6 women died during the year, being an increase of 9 men and a decrease of 2 women as compared with last year.

The death-rate, calculated on the daily average number resident, is 8 per cent.

Of those who died, one male patient had been in the asylum for 46 years, and two for 36 years. Two were suffering from gross lesions of the brain, were moribund on admission, and lived only for ten days. One patient was admitted in an advanced state of pregnancy, was congenitally deformed and suffering from kidney disease. She was delivered of a premature child by forceps under general anaesthesia on the second day after admission. Being quite unfit for child bearing in every respect, and her kidney trouble being aggravated by her pregnancy, she died within ten days.

Nine of the patients who died were over 70 years of age, one being 89 and one 92.

The certified causes of death were as follows:—Senile Decay, 4; Diseases of the heart and blood vessels, 4; organic brain disease, 3; general paralysis of insane, 2; lobar pneumonia, 1; bronchitis, 1; nephritis, 1; cancer of liver, 1; intestinal obstruction, 1; tumour of brain, 1; disease of central nervous system, 1; cerebral haemorrhage, 1; epilepsy, 1.

#### POST MORTEM ROOM.—

The construction of the Post Mortem Room, Mortuary, and Chapel was completed in the month of May. The Post Mortem room has been found quite convenient and satisfactory in its arrangement.

#### GENERAL.—

There were no epidemic forms of illness amongst the patients, and no escapes during the year, that is, no patient was absent during the night without permission.

Four patients were allowed out "on pass" for 28 days in care of relatives to test their fitness for discharge; all of them proved themselves fit.

Twelve patients are allowed parole in the grounds about the institution and one male patient outside the grounds.

#### ENTERTAINMENT :—

A dance is held each week, and an entertainment each month during the winter, for the patients, as well as excursions by motor transport during the summer months. The wireless is installed in all the day rooms, and newspapers, books, playing cards, and other games are supplied in the wards.

The nursing staff, as usual, had their respective wards tastefully and suitably decorated at Christmas and New Year. At the kind invitation of Mrs Clayton, Manageress of the B.B. Cinema, 90 patients and staff attended an afternoon performance at the pictures, to which the party were conveyed in buses by Mr Dunlop. Our best thanks are due to this lady and gentleman for their generosity and thoughtfulness for the patients, who are very grateful.

In the month of April a football team was formed consisting of patients and staff, and the Committee agreed to supply jerseys, boots, and other articles of clothing. During the course of the year 41 matches were played with outside teams, 22 were won, 12 lost, and 7 drawn. A great deal of interest and keenness has been shown in these matches by the attendants and patients, non-playing as well as playing. Attendant Laird, who acts as Captain of the team, has taken a great deal of trouble, and given a lot of his time towards arranging the matches and training the players. Much credit is due to him for the success of the innovation, which certainly has justified any expense incurred, as well as being a means of providing healthful exercise.

#### ACCOMMODATION :—

Many of the wards and corridors, especially on the male side, continue to require further attention.

#### STAFF.—

Fortunately there was no case of serious illness amongst the staff. Eight, however, were off duty for short periods on account of minor ailments.

Four male and two female nurses passed the preliminary nursing examination of the Royal Medico-Psychological Association, and three female nurses—two with distinction—qualified at the final examination to hold the certificate of the Association. The usual assistance and instruction continues to be given to the probationers by means of lectures and demonstrations, attendance at a number of which is necessary for qualification purposes. Perhaps I should repeat that it is a matter of the greatest importance that all probationers who are engaged should have most complete and detailed knowledge of the attitude and conduct they are expected to adopt towards the patients with whom they come in contact in the course of their duties. Mental nursing differs greatly from any other form of nursing, and exceptional capacity for observance, tactfulness, patience, and self control are necessary in order to avoid what may be at times disastrous consequences, either to a patient, or to a nurse. The passing of examinations is necessary and important, but unless a mental nurse is endowed with the proper temperament, satisfactory results cannot be expected.

That the efforts of the staff towards securing the comfort, health, and recovery of the patients have again been reasonably successful, is shown by the present statistical returns.

H.M. Commissioner of the General Board of Control paid official visits on the 17th February and 10th September, and supplied satisfactory reports on the general care, attention, condition and treatment of the patients.

I have pleasure in acknowledging the loyal support and assistance of the nursing staff, and the courtesy and consideration shown to me by the Committee during the year.

## BACTERIOLOGICAL EXAMINATIONS.

All bacteriological examinations of ordinary specimens connected with infectious disease were, as formerly, carried out by the Medical Superintendent of Gateside Hospital.

The following table gives the numbers and results of the examinations made:—

Nature of Specimen.	Positive.	Negative	Total.
Throat mucus, ... ..	84	686	770
Sputum, ... ..	25	270	295
Blood. ... ..	5	19	24
Cerebro-spinal fluid, ... ..	...	2	2
Urine, ... ..	...	2	2
Vaginal smears. ... ..	...	2	2
Urethral Smear, ... ..	...	1	1
Pus, ... ..	...	2	2
Fluid, ... ..	...	2	2
Faeces, ... ..	...	2	2
Total, ... ..	114	988	1,102

In addition, seven special examinations were carried out at the Public Health Laboratory, Glasgow, chiefly for the isolation of dysentery and food poisoning organisms, with one positive and six negative results.

Three specimens of material were examined by the biological test at the slaughterhouse for the presence of tuberculosis, with two positive and one negative results.

In addition six specimens of urine were examined by the Friedman test for pregnancy by Messrs Evan, Sons, Lescher & Webb, Runcorn.

One specimen of foodstuff was submitted to chemical analysis by Messrs McCowan & Biggart on account of suspected presence of poisonous material with negative result.

## SERA, VACCINES, AND INSULIN.

**ANTI-DIPHTHERIA SERUM.**—The emergency supply of diphtheria antitoxin at the Public Health Office and the Central Police Station was kept up during the year. It was not found necessary to purchase any material, but 10,000 units were issued to medical practitioners.

**ANTI-SCARLATINAL SERUM.**—Six hundred ccs. were purchased during the year at a cost of £25, and 80 ccs. were issued to medical practitioners while 300 ccs. were used in the maternity hospital.

**ANTI-MENINGOCOCCUS SERUM.**—None of this serum was purchased during the year and none was issued.

T.A.B. VACCINE.—Twenty-four sets of this vaccine were purchased at a cost of £5 8s. and sent to Smithston Institution for the inoculation of the asylum staff.

WHOOPING COUGH VACCINE.—None of this vaccine was issued during the year to medical practitioners for the treatment of cases in necessitous circumstances.

INSULIN.—Five thousand units of Insulin were purchased at a cost of £2 10s. 6d., and 6,500 units were supplied to four patients under the approved arrangements.

DIPHTHERIA IMMUNISATION MATERIAL.—Twelve doses of toxoid antitoxin mixture were issued to general practitioners for the immunisation of persons unable to purchase the material themselves.

## PORT SANITARY ADMINISTRATION.

During the year 84 passenger liners inward bound from Canada and the United States were boarded by the staff of the department. This is the highest number ever recorded in the history of the port, the figures for the last thirteen years being as follows:—

1924, - - -	12	1930, - - -	66
1925, - - -	24	1931, - - -	69
1926, - - -	20	1932, - - -	64
1927, - - -	28	1933, - - -	63
1928, - - -	49	1934, - - -	69
1929, - - -	63	1935, - - -	69
	1936, - - -		84

The total number of passengers landed from these ships was 8,787, of whom 1,740 were aliens and 80 aliens in transit to other countries. One hundred and seventy-seven aliens were examined at the request of the Immigration Officers, but in no case was it necessary to issue a medical certificate. One case of scarlet fever and one of measles required removal to hospital during the year.

One hundred and nine incoming cargo ships were boarded by the staff of the department either at the anchorage or in the harbours, and a general survey was carried out in each case. The chief articles of cargo discharged by 51 ships were sugar,



bone meal, timber, potash, and machinery. Fifty-one ships docked for overhaul, 5 for bunkers, one for machinery repair, and one to await a ship due to undergo trials. In all cases rat guards or equivalent measures were insisted upon as formerly. On the whole the ships were maintained in fairly good sanitary condition, and any defects discovered were pointed out for appropriate action. The health of the crews was on the whole good, five persons in all being removed to hospital, namely, two cases of suspected typhoid fever, two of mumps, and one of measles.

Twenty-six of these ships produced valid deratisation certificates, and 62 valid deratisation exemption certificates, all issued in accordance with article 28 of the International Sanitary Convention of Paris, while 4 ships had valid certificates not on the recognised form, and 2 had no certificate of any kind. Six ships had deratisation certificates and 9 exemption certificates which were not legally valid, one of the latter not being on the recognised form. Ten of these had certificates issued to them, and in 3 the Master's undertaking was received that he would obtain a fresh certificate after proceeding to his home port. Three ships sailed without any action being taken, while 1 was under the jurisdiction of the Admiralty.

Fourteen deratisation certificates were granted during the year, all after fumigation with hydrogen cyanide, 196 rats being recovered, and 33 exemption certificates were issued after due examination of the ship had been carried out.

The work of the Rat Catcher continued to be very useful, and it is now the established practice that every ship is examined very soon after docking, measures of rat destruction being taken if traces of rats are found of such degree as would indicate that trapping might be a useful measure. If it is considered that infestation is too marked, fumigation is recommended. In 18 vessels trapping was used and 165 rats were recovered.

The Parrots (Prohibition of Import) Regulations (Scotland) continued in force during the year and appropriate measures were taken where necessary. One parrot was landed under licence.

Registration of the telegraphic address "Portelth, Greenock" was continued during the year.

## DISINFECTION.

A new Morris delivery van was purchased and has given satisfactory service.

## HOUSE DISINFECTION.—

No change was made in the arrangements for house disinfection during the year.

Thirteen disinfections were carried out following diseases which were not considered infectious, and appropriate charge was made.

## DISINFECTING STATION.—

The work at the disinfecting station was carried out on the same general lines as last year, and the equipment gave good service. The usual overhauls and minor repairs to the plant and buildings were carried out, including the repair of the chimney stack and the fitting of a new lightning conductor, while a new wash-hand basin was installed in the disinfecting chamber.

As indicated in last annual report, a new steam disinfector with a formalin generator was installed. This will greatly improve the facilities available, particularly in dealing with mattresses, which were always a difficulty in the past.

The number of articles so dealt with was 11,437, and of these 10,926 were disinfected and washed, 242 were disinfected only, while 269 were destroyed. Of the articles disinfected, 4,608 were disinfected by steam under pressure, 6,369 by antiseptic solution, while 191 were sprayed with formalin.

## RECEPTION HOUSE.

The Reception House was not used during the year for the isolation of contacts of infectious disease. Twenty-three persons, however, were housed for periods amounting in all to 44 days, the average stay per person being nearly two days. Sixteen of these persons were admitted in order that satisfactory disinfection of house, body, and personal clothing might be carried out on account of scabies, the disease being treated while the persons were in residence, and 7 were admitted for cleansing on account of vermin infestation.

Twenty-six families were provided with blankets on loan during disinfection following infectious disease as an alternative to their admission to the Reception House.

## MILK AND DAIRIES.

The correct detail regarding the amount of milk produced or distributed appears always to be difficult to obtain, but the following figures show an approximation of the milk position in the burgh.

The total estimated average daily amount of milk produced in the burgh is 319 gallons, while  $5497\frac{1}{4}$  are brought in from outside sources. Of this total quantity of  $5,816\frac{1}{4}$  gallons,  $3,890\frac{3}{4}$  are distributed locally, 873 are distributed outwith the burgh, and  $1,052\frac{1}{2}$  are utilised for manufacturing purposes. The average daily liquid milk consumpt of the population would thus appear to be in the region of .388 of a pint.

Of the milk consumed as such, 58.28 per cent. is graded milk, while 8.66 per cent. is ungraded milk distributed in bottles, and 33.06 per cent. is ungraded milk sold loose. This last amount consists of 4.81 per cent. pasteurised, 4.71 per cent. quasi-pasteurised, and 23.50 per cent. untreated.

Some difficulty was experienced with regard to the unsatisfactory outside sources of supply, particularly in connection with milk for distribution to schools, but after considerable correspondence with the County Authority and the Scottish Milk Marketing Board, a measure of improvement appeared to have been achieved.

*Supervision—*

Control of the milk supply was exercised as formerly, and on the whole the methods of handling appear to be fairly satisfactory. Bacteriological check was again employed and the detailed results are given later in this section.

*Grading of Milk.*

Two pasteuriser's licences were issued during the year, and 106 dealer's licences, 50 for certified milk, 5 for tuberculin tested milk, one for standard milk, and 50 for pasteurised milk. Of the total burgh supply, 58.28 per cent. is of graded quality, 7.81 per cent. being certified, 5.66 tuberculin tested, and 44.81 pasteurised.

*Bacteriological Examinations—*

Under the scheme for bacteriological examination, 391 samples were examined from 382 supplies and the result was as follows:—

	Sources of Supply.							Distri- bution.		Supp. to Schools		Total.	Percentage.
	Local Producers.	Outside Sources of Supply to Wholesale Dealers.	Outside Producers retailing in the Burgh.	Outside Producers supplying Retail Purveyors.	Graded Milk.	Outside Producers supplying for Pasteurisation.	Creameries.	Retail Purveyors.	Wholesale Dealers.	Producers supplying Wholesale Dealers.	Milk as supplied to Schools.		
Number of Supplies from which Samples were taken, - - -	28	17	4	10	23	77	2	79	16	81	46	382	—
Number of Samples, - - -	28	17	4	11	23	77	2	79	11	81	53	391	—
Bacterial content of samples per cc.													
Not over 5,000, - - -	3	—	—	1	15	3	—	6	2	14	9	53	13.3
Over 5,000 not over 10,000,	7	3	1	3	1	6	—	4	1	12	11	49	12.3
„ 10,000 „ 30,000,	10	8	1	1	6	11	—	11	3	22	9	82	20.9
„ 30,000 „ 100,000,	5	2	2	3	3	22	2	24	2	12	3	80	20.4
„ 100,000 „ 200,000,	—	2	—	1	—	9	—	9	1	6	2	30	7.6
„ 200,000 „ 500,000,	1	—	—	—	1	9	—	5	2	2	2	22	5.6
„ 500,000 „ 1,000,000,	—	1	—	—	2	2	—	6	—	3	3	17	4.3
„ 1,000,000 „ 2,000,000,	2	1	—	2	—	15	—	14	—	16	14	58	14.8
B. Coli absent, - - -	19	10	—	3	19	29	1	20	1	49	26	177	45.2
B. Coli present in 1/10cc., - -	9	7	4	8	9	48	1	59	10	32	27	214	54.7
B. Coli present in 1/100cc., -	7	5	4	7	6	27	1	47	7	18	23	152	38.5

It will be seen from the above that 75.19 per cent. of the samples were within the limit prescribed for standard milk as far as the number of bacteria was concerned. In addition to the above, 16 empty bottles were examined and 11 found to be sterile, while 5 contained from 22-110 organisms: 3 cream cartons were examined, and one was found to be sterile, one contained 22 organisms, and the other 6,864 organisms.

#### *Tuberculosis—*

One hundred and fifty-eight samples of milk were submitted to the biological test during the year. Of these, two gave a positive reaction, and in both cases a cow suffering from tuberculosis of the udder was found at a producing farm outwith the burgh and appropriately dealt with. In addition, one case of tuberculous mastitis was discovered within the burgh and dealt with under the Tuberculosis Order, 1925. This measure continues to be of the utmost value.

#### *Infectious Disease—*

No cases of infectious disease spread by milk were encountered during the year and no difficulty was experienced in deal-

ing with such cases as occurred in premises where milk was handled. It was not found necessary to stop the milk supply from any dairy or milk shop during the year.

### *Veterinary Inspection—*

The Veterinary Inspector reports that the average number of cows in the burgh is 190, and the standard of cleanliness is generally very satisfactory. During the year 60 inspections were carried out at average intervals of approximately 8 weeks, and 1,143 examinations of individual cows were made. Five cows were found on clinical examination to be suffering from inflammation of the udder, and the use of the milk from these cows for human consumption was prohibited until the condition cleared up. One cow was found to be suffering from tuberculosis of the udder, as already mentioned. In no case was the tuberculin test applied under section 22 of the Milk and Dairies (Scotland) Act, 1914. In 9 cases samples of milk were taken from cows found with abnormal udders within the burgh, and the biological test was employed, with one positive result as noted above.

## MEAT INSPECTION.

### SLAUGHTERHOUSE:—

The work at the slaughterhouse continued to be satisfactory, and the arrangements for meat inspection during the year remained unaltered.

The following information which refers to the period 16th May, 1936, to 15th May, 1937, has been kindly supplied by Mr Peter McIntyre, M.R.C.V.S., Veterinary Inspector:—

CLASS.	Number Slaughtered.	Number affected with Tuberculosis.	Percentage affected with Tuberculosis.	Whole Carcases seized for Tuberculosis.	Parts of Carcases seized for Tuberculosis.	Whole Carcases seized for diseases other than Tuberculosis.	Parts of Carcases seized for diseases other than Tuberculosis.
Bullocks	2,122	199	9.3	2	17	1	2
Bulls,	140	42	30.0	2	4	—	3
Cows,	1,279	652	50.9	38	92	15	16
Heifers,	1,228	161	13.1	5	18	1	3
Swine,	2,915	194	6.6	1	3	4	13
Sheep,	14,679	—	—	—	—	22	9
Calves,	1,202	7	0.58	6	—	10	—
Total	23,565	1,255	5.32	54	134	53	46



The following is the list of conditions which were responsible for the total or partial seizure of carcasses:—

Total Seizure.—Decomposition, 5; dropsy, 4; emaciation, 15; gastritis, 1; injuries, 6; peritonitis, 1; pyrexia, 17; rachitis, 1; swine fever, 2; traumatic gangrene, 1; tuberculosis, 54.

Partial Seizure.—Abscesses, 8; adhesions, 5; arthritis, 3; injuries, 25; melanosis, 1; peritonitis, 3; traumatic pericarditis, 1; tuberculosis, 134.

The approximate weight of the meat and organs destroyed during the year was 31 tons 6 cwts.

#### BUTCHERS' SHOPS, ETC.

The routine inspection of meat in butchers' shops, cold stores and other similar premises is carried out by the slaughterhouse staff, and during the year the weight of meat seized in this work was 8 lbs.

### HOUSING AND TOWN PLANNING.

#### NEW HOUSES.—

The following information regarding houses certified for occupancy during the year has been kindly supplied by the Master of Works:—

#### Private Enterprise:—26 houses.

- 1 flat of 4 apartments.
- 1 flat of 5 apartments.
- 6 semi-detached bungalows of 4 apartments.
- 10 semi-detached villas of 5 apartments.
- 4 semi-detached villas of 6 apartments.
- 1 semi-detached villa of 7 apartments.
- 1 villa of 7 apartments.
- 1 villa of 9 apartments.

#### Dwellinghouse formed by dividing self-contained villa.—

- 1 house of 5 apartments.

#### Local Authority:—408 houses.

#### Gibbshill and Bogston, etc. Site.—

- 224 tenement houses of 3 apartments.
- 174 tenement houses of 4 apartments.
- 10 flatted houses of 3 apartments.

## INSPECTION OF DISTRICT.—

The number of houses inspected for the purposes of the Housing (Scotland) Acts, 1925-35 was 52.

During the seven years 1930-36, 1,777 houses have been thus examined, and of these, 7 were not found to be unfit. Action has been taken in the case of 1,444 as follows:—1,210 by Clearance Area followed by Compulsory Purchase, 11 by Clearance Area only, and 223 by other procedure. Many of the families in these houses have not yet been rehoused and thus no action was considered possible during the year in the case of the remaining 326 houses.

## SLUM CLEARANCE.—

The four Compulsory Purchase Orders mentioned last year were confirmed during 1936, in the case of Tobago Street, Lower Vennel, and Broad Close Areas, without alteration. The John Street Area Order, however, was amended, and the subjects at Nos. 2 and 12 St. Lawrence Street were excluded therefrom. In addition, after inspection of the properties, the Department of Health directed that payment in accordance with Section 58 of the Housing (Scotland) Act, 1935 should be made by the Local Authority in respect of 22 dwellinghouses in four different properties.

*Operations in Clearance Areas.*—

The last of the families residing in the Central Area was displaced on 26th August, and in all 11 houses (includes 9 single apartments in a farmed-out house), embracing 13 families and 58 persons, were closed during the year and the occupants rehoused. Apart from those containing business premises, halls, etc., all buildings in the Area have now been demolished and the sites cleared, while considerable headway has been made with houses built under the re-development plan. The acquisition by agreement of adjoining ground has permitted an improvement in the lay-out plan, particularly as far as the provision of shops is concerned.

One hundred and seven houses were closed in the John Street Area during the year and 140 families, comprising 614 persons, were re-housed. It was not found possible to make a start with re-development.

No houses in the Tobago Street (North) Area were closed, but 2 families, comprising 7 persons, were rehoused.

In the Lower Vennel Area 12 houses were closed and 13 families, comprising 72 persons, were rehoused.

Four houses in the Broad Close Area were closed and 5 families containing 23 persons, were rehoused.

Representations with regard to "28 West Blackhall Street Area" and "11 Main Street Area" were made on 9th May and 7th September respectively. These areas involved 8 and 3 dwelling-houses, but, as the properties belonged to the Corporation, no further proceedings were necessary and the corresponding orders were approved.

#### *Operations outwith Clearance Areas.—*

Ninety-three dwellinghouses occupied by 106 families, comprising 444 persons, were closed during the year. Some of these operations were made necessary by the delay in the confirmation of the Compulsory Purchase Orders, and the fact that new houses were completed and ready for occupancy.

#### *Summary.—*

It will thus be seen that 238 houses were closed during the year involving 290 families and 1,271 persons.

#### **OVERCROWDING.—**

One hundred and forty-one cases of overcrowding were directly relieved by transfer of the families to new houses, in 65 cases on account of numbers only, and in 76 because of numbers in addition to illness problem in accordance with the Corporation decision mentioned last year. Apart from these, 114 overcrowding occupiers of Local Authority 2 apartment houses were decrowded into new houses, their houses being used for rehousing purposes. (64 similar cases were dealt with in 1935). Thus 255 cases of overcrowding were relieved by the Local Authority's activities during the year, and in no case was any decrowded house overcrowded again during the year.

The second part of the housing survey mentioned in last year's report, namely, the measurement of rooms, was completed towards the end of 1936, and certain adjustments fall to be made to the figures then recorded. These were occasioned by: (1) subsequent measurement of rooms having necessitated changes in category, and (2) the discovery that inaccurate information had been received from the householders who completed the schedules. The main alteration that falls to be made is a net increase in the percentage of overcrowded houses from 33.7 to 34.5 per cent.

## SUB-LETTING.—

This practice still continues in Local Authority housing schemes, and has shown definite signs of spreading to the new schemes which are themselves used partly for the abatement of overcrowding, of which sub-letting is an obvious cause. Prompt action has been taken and improvement secured, but continual watchfulness will be necessary. In the older schemes it may not, unfortunately, be possible to stamp out the practice until more new houses become available. Young couples who wish to get married have had no housing provision made for them, and they naturally take the line of least resistance and live with one or other of the parents or in a sublet room elsewhere: they cannot be expected to wait indefinitely for housing accommodation, and their position is undoubtedly difficult.

## THE FUTURE.—

The new housing operations of the Local Authority are not yet far enough advanced to allow of satisfactory anticipation of their relative effects on the components of the housing problem. The worst numerical overcrowding cannot in practice be dealt with first as houses of 5 apartments are not yet available, and no decision has so far been made to build any 6 apartment houses. It should be remembered that any degree of overcrowding is greatly aggravated by its presence in unfit houses, and that, where possible, families so placed should be rehoused before those with the same problem in a fit house are decrowded. This, although theoretically possible, is not always so in practice as there are, *inter alia*, other factors which militate against the removal of individual tenants from unfit houses until the whole tenement can be vacated: this was experienced in both the Central and John Street Areas. Furthermore there are many unfit houses in the burgh against which, so far, no action has been taken on account of the present Clearance Schemes not yet being completed. It is thus of great importance to realise that the overcrowded unfit house is the greatest problem of all, and that accordingly slum clearance still remains the more pressing of the two evils, and also that the clearance of slums automatically disposes of a portion of the existing overcrowding. There is undoubtedly a danger that slum clearance may tend to be neglected in the enthusiasm to deal with the numerically larger problem of overcrowding in general. It is to be hoped that this will not materialise.

The operation of decanting as already indicated has been used in an attempt to deal with the two problems together, but so far only in Local Authority schemes. Here the Local Authority has control over the decrowded houses and can use them for rehousing tenants living in unfit houses. If an arrangement could be made with private owners and factors, whereby tenants from unfit houses would be accepted by them as occupiers of their houses, decrowded by the Local Authority, considerable headway might be made, but so far it has not been possible to come to such an agreement. Even if such arrangement were made the rents chargeable for these privately owned houses will not in some cases be of such a level as can be paid by the tenants from slum properties, and thus the decanting operation will not be by any means complete.

#### TOWN PLANNING:—

No further progress has been made in this matter since the last report.

### FACTORIES AND WORKSHOPS.

On the register kept by the Local Authority there were 232 workshops, including factory bakehouses. Four hundred and seventy-one visits of inspection were made by the Sanitary Inspector to workshops and 70 to workplaces. Intimations under the Public Health (Scotland) Act, 1897 were found necessary in 12 cases as follows:—

(1) Want of cleanliness,	-	-	-	-	-	5
(2) Unsuitable or defective sanitary conveniences,						6
(3) Other nuisances,	-	-	-	-	-	8

The terms of the intimations were complied with satisfactorily in all cases.

One list, involving 108 outworkers, and one involving 102 outworkers, were received in February and August respectively, while 19 intimations were transmitted to other Local Authorities in February and 17 in August.

The work engaged in by these outworkers included knitting, crocheting and sewing, and the condition of the homes of those resident in the burgh was in all respects satisfactory.



## WATER SUPPLY.

A full supply of water for domestic, trade and mill power purposes was maintained during the year. The minimum amount of water in store occurred on 18th July, when the supply in the various reservoirs was 133 days for all purposes.

The average consumpt of water per head per day for domestic purposes was approximately 40 gallons.

Quarterly analyses of the water from the different sources of supply were made by the Public Analyst, and these showed that it was in all respects suitable for domestic purposes.

## DRAINAGE.

There was no trouble experienced during the year with flooding in the burgh, and the drainage system gave satisfactory service.

The sewage of the burgh is discharged without purification direct into the Firth through eleven outfall sewers.

## RIVERS POLLUTION.

No complaint was received during the year regarding pollution of streams within the burgh. Application, however, was again made by the Clyde Navigation Trustees to the Board of Trade for permission to deposit in the Firth of Clyde dredgings, etc., to a maximum amount of 1,000,000 barge tons per annum during the period of four years from 16th April, 1937.

## NUISANCES.

No medical certificates were issued in connection with nuisances as defined in section 16 of the Public Health (Scotland) Act, 1897.

## METEOROLOGY.

The following information has been kindly supplied by Mr James McAlister, M.Inst.C.E., Engineer and Superintendent of Water Works, regarding the meteorological data for 1936. The readings were all taken at Prospecthill filters which are situated about two hundred feet above sea level.

MONTH.	Air Pressure. Mean Reading at Station Level and 32° C.	Air Temperature.		Rainfall in inches.	Number of days on which 0.01 or more fell.	Humidity per cent.
		Mean of				
		Maximum.	Minimum.			
January,	29.420	40.9	34.0	6.55	22	89
February,	29.696	40.8	33.1	3.74	15	89
March,	29.819	48.4	39.5	4.04	20	85
April,	30.026	50.9	37.7	1.55	8	68
May,	30.117	59.2	44.8	2.73	12	76
June,	29.990	65.2	50.0	1.73	15	71
July,	29.695	64.3	52.6	6.66	21	82
August,	30.016	65.0	54.0	2.75	22	82
September,	29.988	61.9	51.2	4.12	17	85
October,	29.999	54.3	44.4	7.72	17	83
November	29.815	46.9	38.5	4.94	20	90
December	29.840	46.4	36.9	9.90	27	85

The total rainfall amounted to 56.43 inches as compared with 58.77 inches in 1935, and 63.05 inches, the mean of the forty-five years 1890-1935.

### PROPAGANDA.

The usual supply of leaflets on health matters was maintained for distribution at the Public Health Office, where numerous posters were also displayed. Bills giving information on venereal diseases were exhibited in all public conveniences.

Special posters on general public health subjects were shown on the large frames in different situations in the town. It would be of benefit if the number of these frames could be increased.

A meeting for adults under the auspices of the Scottish Branch of the British Social Hygiene Council was held during the year when an address was given and films shown.

## APPENDIX.

TABLE I.—VITAL STATISTICS.

## (A) BIRTHS, DEATHS AND MARRIAGES.

	Numbers Registered in District.	Transfers.		Corrected Number.		
		Out.	In.	Both Sexes.	Males.	Females.
Total Births (including Illegitimate), - - -	1,618	14	30	1,634	864	770
Illegitimate Births, -	85	5	13	93	41	52
Marriages, - - -	593	...	...	...	...	...
Deaths, - - -	1,134	81	53	1,106	596	510

## (B) DEATHS AND DEATH-RATES IN AGE GROUPS.

AGES.	Population Estimated at Mid-Year by M.O.H.	Number of Deaths.	Percentage of Total Deaths.	Death-rate per 1000 of the Population.	Average Death-rate per 1000 of population during preceding 5 years
Under 1 Year, -	1,792	165	14.92	92.07	91.32
From 1—5 Years, -	6,347	35	3.16	5.51	13.19
„ 5—10 „ -	8,345	15	1.36	1.79	3.18
„ 10—15 „ -	8,129	16	1.45	1.96	2.04
„ 15—25 „ -	14,359	48	4.34	3.34	3.55
„ 25—35 „ -	11,804	44	3.98	3.72	4.58
„ 35—45 „ -	9,993	78	7.05	7.80	7.52
„ 45—55 „ -	8,766	104	9.40	11.86	11.87
„ 55—65 „ -	6,325	158	14.28	24.98	25.12
„ 65—75 „ -	3,424	238	21.52	69.50	66.12
„ 75—85 „ -	1,093	161	14.56	147.30	139.71
„ 85 and over, -	147	44	3.98	299.31	248.73
TOTAL. -	80,524	1,106	100.00	13.73	13.98

TABLE II.—CAUSES OF DEATH (corrected for Transfers)—REGISTRAR GENERAL—1936.

CAUSES OF DEATH.	ALL AGES.			AGE.									
	Both Sexes.	Males.	Females.	1—	5—	10—	15—25—	35—	45—	55—	65—	75—	85 and over.
Typhoid Fever (including Paratyphoid), -	...	3	1	2	...	...	...	...	...	...	...	...	...
Measles, -	4	...	1	1	...	...	...	...	...	...	...	...	...
Scarlet Fever, -	1	1	...	1	...	...	...	...	...	...	...	...	...
Whooping Cough, -	1	...	2	2	...	...	...	...	...	...	...	...	...
Diphtheria, -	2	12	8	1	1	...	...	...	...	...	...	...	...
Influenza, -	20	2	2	1	1	...	...	...	...	...	...	...	...
Cerebro-Spinal Fever, -	2	2	...	...	...	...	...	...	...	...	...	...	...
Other Epidemic Diseases, -	3	1	2	...	...	...	...	...	...	...	...	...	...
Tuberculosis of Respiratory System, -	51	32	19	3	2	2	9	12	7	1	...	...	...
Other Tuberculous Diseases, -	23	15	8	5	4	3	1	2	2	2	...	...	...
Other Infectious and Parasitic Diseases, -	5	4	1	...	...	...	1	1	2	1	...	...	...
Cancer, Malignant Disease, -	116	55	61	...	...	...	2	5	15	32	36	25	1
Diabetes Mellitus, -	4	...	4	...	...	...	...	...	...	...	...	...	...
Other General Diseases, Chronic Poisonings, -	23	9	14	2	1	4	...	...	3	7	1	...	...
Cerebral Hemorrhage, etc., -	105	51	54	...	...	...	...	...	15	20	35	24	6
Other Dis. of Nervous System & Sense Organs, -	39	23	16	4	2	1	1	6	6	5	7	2	...
Heart Disease, -	167	85	82	...	...	...	3	4	18	34	64	34	5
Other Circulatory Diseases, -	28	21	7	...	...	...	...	...	1	6	11	9	1
Bronchitis, -	56	23	33	5	...	...	2	4	4	7	19	9	4
Pneumonia (all forms), -	84	57	27	34	...	...	6	8	8	5	7	3	...
Other Respiratory Diseases, -	16	6	10	1	...	...	1	4	1	3	3	2	...
Gastric and Duodenal Ulcer, -	13	9	4	...	...	...	...	2	3	3	2	2	...
Diarrhoea, etc. (all ages), -	30	18	12	2	1	1	...	2	1	1	1	...	...
Appendicitis, -	8	7	1	...	...	...	...	...	...	...	...	...	...
Cirrhosis of Liver, -	1	1	...	...	...	...	...	...	...	...	...	...	...
Other Diseases of Liver, etc., -	10	1	9	...	...	...	...	1	1	2	5	...	1
Other Digestive Diseases, -	19	10	9	3	1	1	...	1	1	6	2	4	...
Acute and Chronic Nephritis, -	28	14	14	...	...	...	3	5	5	2	7	...	...
Other Diseases of Genito-Urinary System, -	27	23	4	1	...	...	1	1	1	2	12	7	2
Puerperal Sepsis, -	3	...	3	...	...	...	...	...	...	...	...	...	...
Other Puerperal Causes, -	7	...	7	...	...	...	6	1	...	...	...	...	...
Diseases of Skin and of Locomotor System, -	11	7	4	4	2	...	...	1	...	...	...	...	...
Concen. Deb., Prem. Birth, Malformations, etc.	77	37	40	77	...	...	...	...	...	...	...	...	...
Old Age, -	48	24	24	...	...	...	...	...	...	...	...	...	...
Suicide, -	6	4	2	...	...	...	...	...	...	...	...	...	...
Other Violence, -	48	27	21	3	3	1	9	1	1	...	...	...	...
Causes ill-defined or Unknown, -	20	14	6	3	...	...	2	2	...	...	...	...	...
ALL CAUSES, -	1,106	596	510	165	36	15	48	78	104	158	238	161	44

CAUSES OF DEATH.	District.												Total.			Death-rate per 1000 of Population.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
	A.						B.										C.						D.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
	M.			F.			T.			M.							F.			T.			M.			F.			T.			M.			F.			T.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.		M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Enteric Fever (including Paratyphoid),	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



TABLE IV.—POPULATION AND PRINCIPAL RATES  
PER 1,000—REGISTRAR GENERAL.—1881-1936.

Year.	Population.	Death-rate.	Birth-rate.	Infantile Mortality Rate.	Tuberculosis Death-rate.	
					Pulmonary.	Non- Pulmonary.
1881-1885	71,578	22.19	38.01	139	2.35	0.96
1885-1890	72,073	18.92	32.23	127	2.03	0.69
1891	63,432	22.54	32.55	163	1.82	0.56
1892	63,027	19.74	35.83	116	2.01	0.65
1893	62,713	20.90	32.96	134	1.59	0.65
1894	62,400	19.23	32.20	133	2.09	0.49
1895	62,090	23.06	33.84	152	1.62	0.82
1891-1895	62,732	21.09	33.47	139	1.82	0.63
1896	61,781	17.84	33.08	120	1.76	0.55
1897	61,475	22.17	33.05	159	2.06	0.68
1898	61,170	21.38	35.20	136	2.07	0.83
1899	67,269	19.64	31.01	142	1.70	0.83
1900	67,776	19.18	32.50	130	1.59	0.84
1896-1900	63,894	20.04	32.96	137	1.83	0.74
1901	68,264	19.45	29.84	132	1.46	0.90
1902	68,756	19.85	31.74	122	1.81	0.94
1903	69,252	18.93	29.56	144	1.68	0.80
1904	69,749	17.65	30.09	123	1.20	0.93
1905	70,253	18.78	30.49	116	1.31	1.05
1901-1905	69,254	18.93	30.34	127	1.49	0.92
1906	70,758	17.89	32.21	127	1.34	1.25
1907	71,269	17.79	30.25	104	1.54	1.08
1908	71,783	17.00	30.31	118	1.21	1.12
1909	73,214	15.01	26.73	95	1.09	1.09
1910	74,667	18.87	28.85	129	1.16	0.96
1906-1910	72,338	17.31	29.67	114	1.26	1.10
1911	75,028	18.44	30.73	113	1.50	0.95
1912	76,337	18.70	31.30	119	1.44	1.02
1913	77,156	18.22	31.03	116	1.47	0.86
1914	77,642	18.04	32.84	108	1.00	0.91
1915	77,695	20.14	29.49	145	1.15	0.91
1911-1915	76,771	18.70	31.07	120	1.39	0.93
1916	78,642	17.10	29.20	109	1.42	0.75
1917	79,299	15.10	26.88	92	1.28	0.83
1918	79,574	17.88	26.52	110	1.10	0.82
1919	79,613	17.25	28.73	99	0.94	0.59
1920	80,436	16.51	33.34	104	1.06	0.69
1916-1920	79,512	16.76	28.93	102	1.16	0.73
1921	81,120	14.59	30.15	93	1.01	0.54
1922	81,370	19.17	27.68	149	1.03	0.68
1923	81,522	12.94	27.04	77	0.99	0.54
1924	82,096	15.22	24.16	113	1.00	0.44
1925	81,200	14.32	24.54	107	0.85	0.52
1921-1925	81,461	15.24	26.71	107	0.97	0.54
1926	81,558	13.74	23.87	90	0.98	0.34
1927	80,889	13.26	22.17	89	0.87	0.44
1928	79,204	15.74	24.05	126	0.80	0.34
1929	81,844	15.57	22.22	111	1.04	0.26
1930	82,131	13.69	22.98	96	0.88	0.30
1926-1930	81,125	14.40	23.05	101	0.91	0.33
1931	79,012	13.50	23.40	78	0.90	0.30
1932	79,387	14.63	21.47	121	0.66	0.36
1933	79,486	15.03	20.60	108	0.88	0.18
1934	79,605	12.90	20.86	89	0.79	0.21
1935	79,980	13.85	21.16	92	0.76	0.09
1931-1935	79,494	13.98	21.49	97	0.79	0.22
1936	80,524	13.73	20.29	101	0.63	0.28

TABLE V.—SOURCES OF NOTIFICATIONS OF INFECTIOUS DISEASES—1936.

DISEASE.	By Whom Reported.						Total.
	House-holders.	House-holders & Doctors.	Doctors.	Public Health Officers.	School Medical Officers.	Registrars.	
Pneumonia, -	...	...	50	...	...	11	61
Enteric Fever, -	...	...	5	...	...	1	6
Diphtheria, -	...	5	103	...	...	...	108
Scarlet Fever, -	...	10	68	...	...	...	78
Puerperal Fever, -	...	...	2	...	...	...	2
Puerperal Pyrexia, -	...	...	19	...	...	...	19
Erysipelas, -	...	2	57	...	...	...	59
Cerebro-Spinal Fever, -	...	...	2	...	...	...	2
Measles, -	885	...	7	...	14	...	906
Chickenpox, -	754	...	5	1	60	...	820
Whooping Cough, -	107	...	...	...	5	...	112
Mumps, -	499	...	3	3	80	...	585
Ophthalmia Neonatorum, -	...	...	...	...	...	...	28
TOTAL, -	2,245	17	321	4	159	12	2,786
							28

TABLE VI.—MONTHLY INCIDENCE OF INFECTIOUS DISEASES—1936

MONTH.	Diphtheria	Erysipelas	Scarlet Fever.	Enteric Fever.	Puerperal Fever.	Puerperal Pyrexia.	Cerebro-Spinal Fever.	Pneumonia.	Chickenpox.	Measles.	Whooping Cough.	Mumps.	Ophthalmia Neonatorum.	Total
January,	21	16	4	2	...	1	...	6	72	6	2	...	3	133
February,	12	3	3	...	...	2	1	5	28	3	...	...	2	59
March, ...	12	3	4	...	...	2	...	4	49	20	2	...	5	101
April, ...	9	4	5	1	...	1	...	5	51	43	9	43	...	171
May, ...	4	1	6	...	...	2	...	3	37	52	9	92	...	206
June, ...	3	3	6	2	2	3	...	6	33	125	8	98	3	292
July, ...	...	3	3	...	...	1	...	5	3	72	3	11	4	105
August,	1	5	9	1	...	2	...	2	16	39	4	10	2	91
September,	6	2	2	...	...	1	1	5	51	115	5	66	7	261
October,	25	3	12	...	...	1	...	4	101	121	5	109	...	381
November	6	12	17	...	...	2	...	3	160	125	26	94	...	445
December,	9	4	7	...	...	1	...	13	219	185	39	62	2	541
TOTAL,	108	59	78	6	2	19	2	61	826	906	112	555	22	2,786

TABLE VII —DISTRICT INCIDENCE OF INFECTIOUS DISEASES WITH NUMBER OF REMOVALS TO HOSPITAL—1936.

DISTRICT.	CASES.	Pneumonia.	Enteric Fever.	Diphtheria.	Scarlet Fever.	Puerperal Fever.	Puerperal Pyrexia.	Erysipelas.	Cerebro Spinal Fever.	Measles.	Chickenpox.	Whooping Cough.	Mumps.	Ophthalmia Neonatorum.	Total.
A.	{ Ascertained, { Removed,	22	3	48	39	2	13	25	*1	365	260	47	152	24	1,001
B.	{ Ascertained, { Removed,	12	3	48	39	2	6	6	...	144	104	18	81	...	107
C.	{ Ascertained, { Removed,	2	...	9	11	...	1	13	...	1	2	...	1	...	393
D.	{ Ascertained, { Removed,	23	*1	37	18	...	4	15	*1	312	335	30	301	3	27
	{ Ascertained, { Removed,	4	...	37	18	...	1	6	...	2	...	...	49	...	1,080
	{ Ascertained, { Removed,	...	...	14	9	...	1	1	...	83	121	17	...	1	58
	{ Ascertained, { Removed,	...	2	13	9	...	1	1	...	1	1	...	...	...	305
SHIPS	{ Ascertained, { Removed,	...	2	...	1	...	...	...	...	2	...	...	2	...	26
	{ Ascertained, { Removed,	...	2	...	1	...	...	...	...	2	...	...	2	...	7
	{ Ascertained, { Removed,	...	...	...	...	...	...	...	...	2	...	...	2	...	7
TOTAL,	{ Ascertained, { Removed,	61	6	108	78	2	19	59	2	906	820	112	585	28	2,786
	{ Ascertained, { Removed,	2	5	107	78	2	9	7	...	7	5	...	3	...	225

\* Died before Removal.

DOUBLE DISEASES.

- 3 cases had scarlet fever and chickenpox.
- 3 " " measles and whooping cough.
- 2 " " measles and mumps.
- 5 " " chickenpox and measles.
- 3 " " chickenpox and whooping cough.
- 8 " " chickenpox and mumps.

Each of these diseases has been entered as a separate case in the above table.

TABLE VIII.—INFECTIOUS DISEASES RATES 1900-1936.

YEAR.	SCARLET FEVER.				DIPHTHERIA.				MEASLES.				WHOPPING COUGH.			
	Incidence rate per 1000.	Death-rate per 1000.	Case mortality rate per cent.		Incidence rate per 1000.	Death-rate per 1000.	Case mortality rate per cent.		Incidence rate per 1000.	Death-rate per 1000.	Case mortality rate per cent.		Incidence rate per 1,000.	Death-rate per 1,000.	Case mortality rate per cent.	
1900	2.55	0.17	6.98		1.19	0.41	34.56		5.48	0.13	2.41		9.42	1.09	11.58	
1901	7.92	0.42	5.36		8.93	0.17	19.67		10.82	0.35	3.24		1.87	0.36	19.53	
1902	7.79	0.85	11.00		1.06	0.43	41.09		26.44	0.49	1.87		1.26	0.13	10.34	
1903	2.33	0.11	4.93		0.54	0.12	23.68		0.66	0.02	4.34		6.55	1.02	15.63	
1904	1.07	0.07	6.66		1.17	0.27	23.17		30.28	0.83	2.74		3.59	0.32	9.16	
1905	2.81	0.32	11.61		0.83	0.21	24.19		31.31	0.82	2.63		3.50	0.76	13.95	
1906	1.92	0.08	4.41		0.70	0.12	18.00		4.04	0.12	3.14		2.54	0.28	11.11	
1907	2.16	0.05	2.59		0.75	0.14	18.51		19.68	0.46	2.35		3.70	0.68	18.56	
1908	0.97	0.01	1.42		0.72	0.16	23.07		14.76	0.58	3.96		3.63	0.47	13.02	
1909	2.89	0.04	1.41		1.05	0.13	12.98		1.73	0.02	1.57		4.73	0.65	13.83	
1910	5.02	0.14	2.93		1.27	0.18	14.73		38.45	1.21	3.16		3.87	0.45	11.76	
1911	5.18	0.18	3.59		1.94	0.09	9.85		4.45	0.17	3.89		5.85	0.42	7.28	
1912	10.02	0.49	4.96		1.21	0.13	10.75		19.93	0.66	3.35		4.12	0.36	8.88	
1913	5.59	0.24	4.39		1.03	0.18	17.50		19.95	0.41	2.07		9.40	0.63	6.74	
1914	2.65	0.05	1.94		1.76	0.12	7.29		11.86	0.33	2.82		4.22	0.33	7.92	
1915	1.90	0.11	6.08		1.72	0.16	9.70		14.32	0.65	4.58		9.38	0.73	7.81	
1916	3.73	0.76	2.04		1.61	0.19	11.81		17.16	0.95	5.55		0.72	0.05	7.01	
1917	2.74	0.06	2.29		1.23	0.12	10.20		10.12	0.20	1.99		11.43	0.80	7.05	
1918	1.36	0.01	0.91		0.70	0.03	5.35		10.19	1.25	12.33		4.52	0.33	7.47	
1919	3.95	0.04	1.58		1.10	0.03	3.40		15.26	0.32	2.13		2.36	0.16	6.91	
1920	1.47	0.06	3.36		1.28	0.07	5.82		5.71	0.21	4.34		6.88	0.27	3.97	
1921	1.31	0.01	0.93		1.76	0.07	4.19		3.69	0.00	0.00		0.62	0.00	0.00	
1922	1.36	0.01	0.90		1.04	0.08	8.23		36.32	2.17	5.98		18.31	0.98	5.36	
1923	4.90	0.07	1.50		1.37	0.07	5.35		6.31	0.14	2.33		0.41	0.02	5.88	
1924	2.64	0.06	2.30		1.79	0.06	3.40		23.02	0.59	2.59		15.87	0.54	3.45	
1925	1.21	0.01	1.01		2.11	0.09	4.65		1.07	0.00	0.00		6.83	0.39	5.76	
1926	3.85	0.00	0.00		3.33	0.13	4.01		21.57	0.46	1.89		0.71	0.01	1.72	
1927	3.48	0.06	1.77		3.20	0.03	1.15		7.76	0.02	0.31		5.24	0.09	1.88	
1928	0.84	0.01	1.40		2.91	0.17	6.06		29.40	1.02	3.46		8.53	0.51	6.06	
1929	2.02	0.00	0.00		2.41	0.07	3.03		0.52	0.02	4.61		6.25	0.46	7.41	
1930	3.61	0.08	2.35		1.57	0.06	3.87		25.09	0.34	1.35		6.24	0.18	2.92	
1931	3.69	0.07	2.05		1.06	0.03	3.57		1.18	0.00	0.00		3.97	0.11	2.86	
1932	10.69	0.12	1.17		1.44	0.05	3.47		38.01	0.90	2.38		3.30	0.06	1.90	
1933	14.10	0.11	0.50		2.05	0.10	4.90		3.95	0.00	0.00		11.14	0.55	4.96	
1934	5.40	0.05	0.93		2.31	0.18	8.15		21.30	0.16	0.70		1.61	0.06	3.81	
1935	1.17	0.01	2.12		1.53	0.07	1.91		13.11	0.03	0.11		1.30	0.01	0.31	
1936	6.01	0.01	0.00		1.33	0.03	1.01		13.11	0.03	0.11		1.30	0.01	0.31	